THE VIDEO SLOT!

Getting Started in Amiga Video Production.

Amazing COMPUTING™ For The Commodore AMIGA®

Your Original AMIGA® Monthly Resource

Volume 8 No. 4 April 1993
US $3.95 Canada $4.95

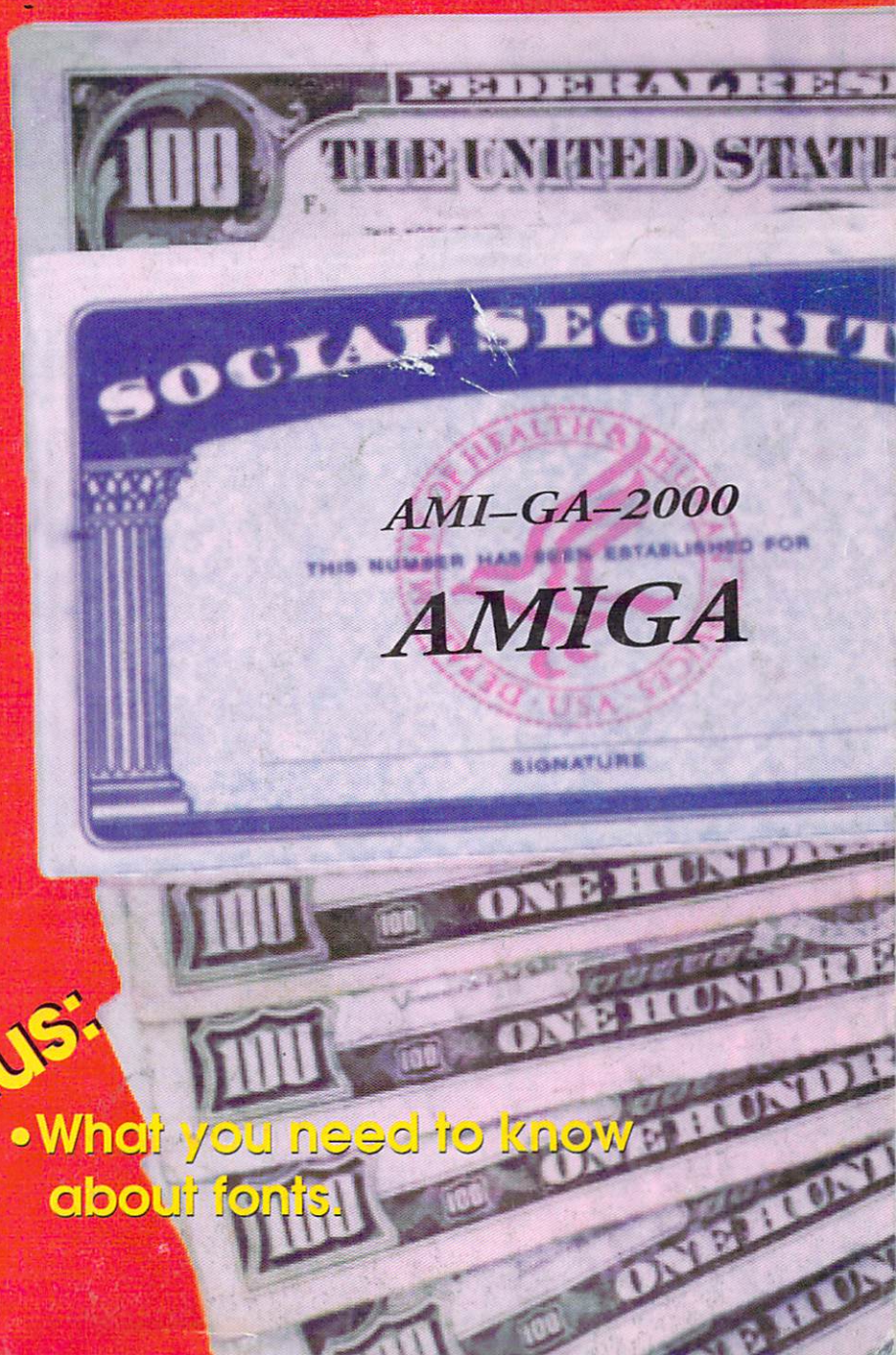
Put the AMIGA to Work: 4 steps to a more productive Amiga

In this issue:

- Video Music Box
- Triple Play Plus
- Realistic Grass with Imagine
- vortex 386SX
- Alladin Tutorial Part 2
- Vision Modeller 3D
- Phone Pak VFX
- Art Expression Project

Reviews:

- Morphus
- MaxiPlan
- CanDo
- fingerTalk
- Contact
- Cyber Empires
- A-Train



Plus:

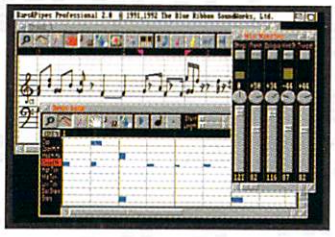
- What you need to know about fonts.

04
74470 74710 9

Music Composition And Multi-Media Authoring In One!

BARS&PIPES PROFESSIONAL

Sound and vision unite to form Bars&Pipes Professional 2.0, software to look and sound your best. Our engineers and musicians combined their expertise to design the Amiga's most sophisticated sequencing package yet.

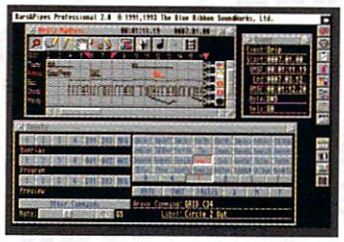


Bars&Pipes Professional encompasses the finest tools available to music and multi-media artists. It's expandable architecture comes complete with multi-track recording, notation, graphical editing, automated mixing, time-line scoring and more.

Plus, we've added dozens of new features like tempo tap, groove quantize, rubato, and sequence trigger. Pattern-style rhythm design with drum mapping, event-specific recording, guitar tablature, and global transport. We've even included dozens of updated Tools and Accessories from our best-selling Add-on Series.

In addition to Bars&Pipes Professional's powerful lineup of composition features, Bars&Pipes Professional now includes Media Madness, exclusive multi-media enhancements that rival leading authoring packages.

With Media Madness, you can combine animation, slides, video, sound effects and music to create spectacular presentations.



The Media Madness Tool set controls Toaster transitions, ANIM file playback, SunRize sound effects, genlocks, video decks, ARexx and more. The Media Madness Recorder saves your presentation, while the stand-alone, freely distributable Player performs on any Amiga and can be controlled by ARexx, SMPTE, and popular programs like Imagine and Real3D!



Bars&Pipes Professional works seamlessly with all of our musical products, like the One-Stop Music Shop 16-bit multi-timbral soundcard, SuperJAM! interactive composer, The PatchMeister universal patch librarian, SyncPro MIDI synchronization box and Triple Play Plus, our 48 channel MIDI interface.

New 2.0 Features:

Notation: Improved notation display and editing • Guitar tablature editing • Background display of alternate track • Saving notation as an IFF image

Editing: Program change selected by name • Pattern style loop editor with drum mapping • SMPTE display in both the graphical and list editors • Event filter display in List editor • Improved song construction • Improved graphical editing • Hit list editing

Recording: Groove quantize • Sequence trigger • Integrated Transport Controls • Event-specific recording/merging • Tempo tap • Rubato

Tools: Tools listed with names in the ToolBox • Slide show presentation • Video Toaster control • ARexx and device control • SunRize direct-to-disk control • Scala control • Animation player • SoundCanvas setup • SuperGen and G-Lock control • Easy Off Tool • Velocity Splitter • Stop! • ToolTrays • Over twenty enhanced Tools from Music Box A and B

Interface: Improved window design, including Workbench 2.0 style front/back buttons • Workbench 2.0 feature support including ASL file requester, public screen and virtual screen size • Preferences saved in an icon

Interoperability: Support for The PatchMeister's automatic installation of Patch Lists • Expanded MIDI File Format support • SMUS conversion, SyncPro, Real 3-D, and Imagine Accessories

THE BLUE RIBBON SOUNDWORKS LTD

Venture Center
1605 Chantilly Dr.
Suite 200
Atlanta, GA 30324
404-315-0212 tel
404-315-0213 fax

Circle 104 on Reader Service card.

The Blue Ribbon SoundWorks, Bars&Pipes Professional, The One-Stop Music Shop, Media Madness, SuperJAM!, SyncPro, The PatchMeister and Triple Play Plus are trademarks of The Blue Ribbon SoundWorks, Ltd. All other brands and/or product names are trademarks of their respective holders. All specifications subject to change without notice.

FOR THE AMIGA® 2000 SERIES



GVP ACCELERATION:

THE TIME TESTED, USER-PROVEN, BEST SOLUTION

A2000 G-FORCE 040 COMBO

POWERED BY 040

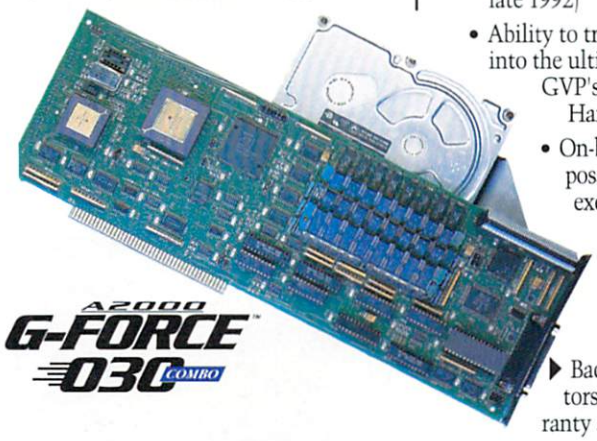
Only the GVP Family of Combo Accelerators are Packed, Stacked and Backed with more of what you want Most!

Don't get stuck. Don't overpay. Don't buy half a solution. Don't take chances. When you're shopping for an accelerator, there is only one thing you should do...

Choose from GVP's family of G-FORCE 040 and 030-based Combo Accelerator boards.

WHY? Because only GVP:

- Has a proven 5 year history of the best product performance and support.
- Gives you the choice of state-of-the-art 68030 or 68040 CPU Power at blazing speeds of 25, 33, 40 or 50MHZ. No matter what your budget or speed requirements, GVP has the right solution for you.
- Provides unsurpassed multi-functionality through superior design integration giving ALL GVP accelerator users:
 - On-board SCSI-II compatible DMA Hard Drive Controller
 - Up to 16MB of high speed 32 Bit-Wide Memory expansion (up to 64MB with 16MB SIMMS available late 1992)
 - Ability to transform your accelerator into the ultimate hardcard with GVP's new improved snap on Hard Disk mount kit
 - On-board future expansion possibilities with the GVP exclusive 32-Bit expansion bus (including GVP's EGS 110/24). This feature alone literally obsoletes ALL other accelerator products.
- Backs ALL GVP accelerators with a full 2-year warranty and upgrade program.



A2000 G-FORCE 030 COMBO

Choose GVP's newest, fastest and feature filled accelerator... the A2000 G-FORCE040

It's the fastest accelerator — bar none:

- 68040 CPU running at up to a blazing 33MHZ clockspeed, outperforms even high end workstations costing thousands more.

It's the most highly integrated — bar none:

- High performance onboard SCSI/SCSI II compatible hard drive controller.
- On-board serial port with speeds up to 625 Kbps and two 16 byte hardware buffers (1 read/ 1 write) to prevent data loss. Ideal for adding additional modems, printers etc.
- On-board user configurable parallel port for Amiga/PC compatibility.
- Future expansion via GVP's exclusive GVP compatible 32-Bit expansion bus.

CALL YOUR GVP DEALER AND ORDER A GVP G-FORCE 030 or G-FORCE 040 TODAY!

GVP

GREAT VALLEY PRODUCTS, INC.
600 CLARK AVENUE
KING OF PRUSSIA, PA 19406
U.S.A.

PHONE 215•337•8770
FAX 215•337•9922

For more information or your nearest GVP Dealer, call 215•337•8770. Dealer inquiries welcome. For technical support call 215•354•9495.

Amiga is a registered trademark of Commodore Amiga, Inc.
All other trademarks are the property of their respective owners.
© 1992 Great Valley Products, Inc.

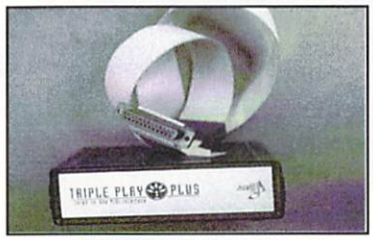
Circle 123 on Reader Service card.

Amazing COMPUTING™ For The Commodore AMIGA



Volume 8
Number 4
April 1993

CONTENTS



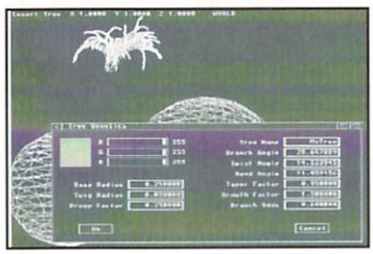
Triple Play Plus from The Blue Ribbon Soundworks.



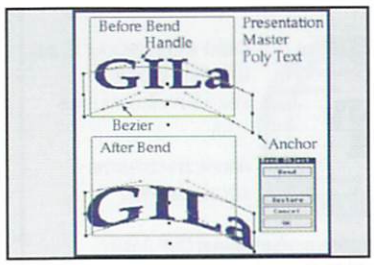
Video Music Box, p27.



Realistic grasslands using *Imagine*, p45



VisionModeller 3D, p73



Make fun titles and logos, p75

In This Issue

24 Triple Play Plus & SyncPro
by Rick Manasa
Care to expand the possibilities and productivity of your Blue Ribbon products? Then check out these innovative interfaces.

27 Video Music Box v1.6
by Shamms Mortier
See why this software lists an almost infinite amount of variability from the included library of parameters.

30 Fonts: Desktop Publishing Fundamentals
by Dan Weiss
Know how to select fonts in DTP to greatest advantage.

45 Realistic Grasslands Using Imagine
by Marc Hoffman
Creating grasslands through the use of powerful image-mapping features found in *Imagine*.

48 Boost Your Productivity
AC outlines four ways to boost your productivity.

57 GoldenGate 386SX
by Dietmar Postl
Can it really transform your Amiga into a fully functional 386SX MS-DOS machine?

73 VisionModeller 3D
by Shamms Mortier
Try out the new features of *Vision-Modeller 3D*.

75 Fun with Lettering
by Merrill Callaway
A tutorial in type manipulation.

Reviews

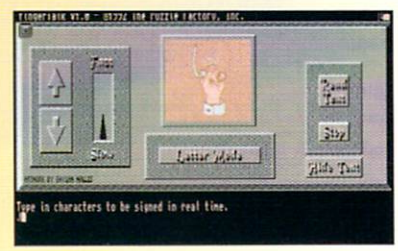
14 Morphus
by Frank McMahon
Here's some morphing competition from Italy, even though, as the author says, *Morphus* is not specifically a morphing program.

15 CanDo
by Rob Hays
From INOVAtronics comes a package that fills the needs of the casual programmer and yet has power to produce commercial-level programs.

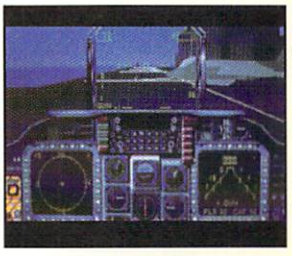
16 MaxiPlan
by Rick Broida
Not all spreadsheets and database managers can verbalize a cell or range and also claim the ability to export/import Lotus 1-2-3 data from the IBM world.

18 Contact 2.0
by Kim Schaffer
Learn how useful a personal contact database manager can be. It even has a database of AmigaDOS commands for you to "pop up."

20 fingerTalk
See if the reviewer gives fingerTalk thumbs up or thumbs down.



AMIGA PRODUCTIVITY



New Products, p8.



New Products, p8.



Get started in video, p38



Go to Atlantis in this latest Indiana Jones adventure, p81

Columns

8 New Products & Other Neat Stuff
by Elizabeth Harris
Discover *Denny Atkin's Best Amiga Tips and Secrets*, Bigfoot Power Supply, *Creepers*, and a host of other new products featured in this month's column.

36 cli directory
by Keith cameron
This month, learn how to change the fonts that appear on your screen.

38 The Video Slot
by Frank McMahon
This month, Frank goes over the basics in getting started in Amiga video.

43 Bug Bytes
by John Steiner
A cry to Kodak for Amiga support, a ParBENCH update, and a bug fix for an AdRAM 540 clock problem are just a few of the topics covered in this month's Bug Bytes.

54 ARexx
by Merill Callaway
From producing custom forms last month to printing envelopes this month on your laser printer, ARexx and PostScript make the way.

69 Roomers
by The Bandito
The Bandito questions Commodore about its role in the future.

81 Diversions
Featuring *Cyber Empire, Indiana Jones and the fate of Atlantis, Combat Classics*, and *A-Train*.

Departments

Editorial 6

List of Advertisers 80

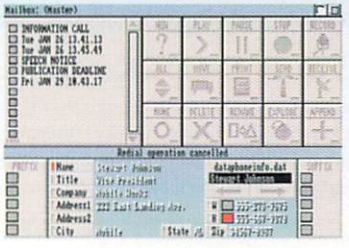
Feedback 90

Public Domain Software....92

And Furthermore 96



In Memorium
John George Kemeny...
Co-developer of BASIC



GVP's PhonePak VFX allows small companies to sound like **BIG** business.

GVP Introduces G-LOCK

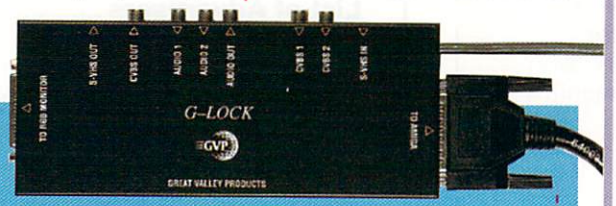
The most ingenious Genlock ever engineered for all Amiga® users

Create video and multi-media productions that totally unite your video, audio, and Amiga graphics on demand... at the click of a mouse!

GVP's G-LOCK is without doubt. the easiest, most flexible, most capable, high performance genlock you can buy for your Amiga.

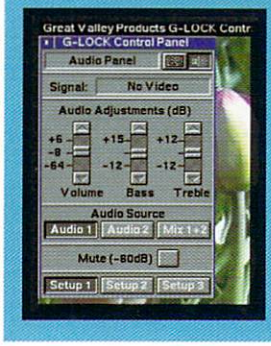
How can we make such a bold statement? Take a look and compare for yourself.

G-LOCK™



G-LOCK advantages abound





The differences between G-LOCK and all other genlock boards start with these time-saving, creativity-generating benefits only available on G-LOCK:

★ Push-button Control Panels with Intuitive, Mouse-Click Simplicity — with Full ARexx and CLI Interfaces.

★ Software Switchable between 2 Composite Video Inputs or 1 Y/C (S-Video) In.

★ Real-Time, Software-Controlled Video Processor (Proc Amp) with Complete Video Signal Processing Control.

★ Complete 2-Input Audio Processing with Real-Time Volume, Bass, Treble, Mix and Mute Control — Add DSS8™ Audio Samples to Your Videos.

★ Software Controlled RGB Color Splitter for Use with NewTek Digi-View™ and Other Video Digitizers.

And only G-LOCK offers...

Full transcoder operation with composite, Y/C, and RGB/YUV outputs; ESC/AA keyer modes control; complete AmigaVision® and Scala™ compatibility; and a host of other features only GVP realized you want from a quality genlock — but you'd never expect — at such an affordable price.

Amiga and AmigaVision are registered trademarks of Commodore-Amiga, Inc. GVP, G-Lock, and DSS8 are trademarks of Great Valley Products, Inc. Digi-View is a trademark of NewTek, Inc © Copyright 1992 Great Valley Products, Inc.

For more information or your nearest GVP Dealer, phone 215-337-8770 today. For technical information call 215-354-9495

GREAT VALLEY PRODUCTS, INC.
600 CLARK AVENUE KING OF PRUSSIA, PA 19406 U.S.A.
PHONE 215•337•8770 • FAX 215•337•9922

Circle 124 on Reader Service card.

Amazing COMPUTING / AMIGA

Amazing Computing For The Commodore AMIGA™

ADMINISTRATION

Publisher:	Joyce Hicks
Assistant Publisher:	Robert J. Hicks
Administrative Asst.:	Donna Viveiros
Circulation Manager:	Doris Gamble
Asst. Circulation:	Traci Desmarais
Traffic Manager:	Robert Gamble
Marketing Manager:	Ernest P. Viveiros Sr.

EDITORIAL

Managing Editor:	Don Hicks
Associate Editor:	Jeffrey Gamble
Hardware Editor:	Ernest P. Viveiros Sr.
Senior Copy Editor:	Paul L. Larrivée
Copy Editor:	Elizabeth Harris
Video Consultant:	Frank McMahon
Art Consultant:	Perry Kivolowitz
Illustrator:	Brian Fox
Contributing Editor:	Merrill Callaway

ADVERTISING

Advertising Manager:	Wayne Arruda

1-508-678-4200, 1-800-345-3360, FAX 1-508-675-6002

Amazing Computing For The Commodore Amiga™ (ISSN 1053-4547) is published monthly by PiM Publications, Inc., Currant Road, P.O. Box2140, Fall River, MA 02722-2140, Phone 1-508-678-4200, 1-800-345-3360, and FAX 1-508 675-6002.

U.S. subscription rate is $29.95 for one year; $46.00, two years. Subscriptions outside the U.S. are as follows: Canada & Mexico $38.95 (U.S. funds) one year only; Foreign Surface $49.97. All payments must be in U.S. funds on a U.S. bank. Due to erratic postal changes, all foreign rates are one-year only.

Second-Class Postage paid at Fall River, MA 02722 and additional mailing offices.

POSTMASTER: Send address changes to PiM Publications Inc., P.O. Box 2140, Fall River, MA 02722-2140. Printed in the U.S.A.

Entire contents copyright© 1993 by PiM Publications, Inc. All rights reserved. No part of this publication may be reproduced without written permission from PiM Publications, Inc..

Additional First Class or Air Mail rates available upon request. PiM Publications, Inc. maintains the right to refuse any advertising.

PiM Publications Inc. is not obligated to return unsolicited materials. All requested returns must be received with a self-addressed stamped mailer.

Send article submissions in both manuscript and disk format with your name, address, telephone, and Social Security Number on each to the Associate Editor. Requests for Author's Guides should be directed to the address listed above.

AMIGA™ is a registered trademark of Commodore-Amiga, Inc., Commodore Business Machines, International

Distributored in the U.S. & Canada by
International Periodical Distributors
674 Via de la Valle, Ste 204, Solona Beach, CA 92075
&
Ingram Periodicals Inc.
1226 Heil Quaker Blvd., La Verne TN 37086

Printed in U.S.A.

GVP'S LATEST ENGINEERING BREAKTHROUGH

POWER YOUR AMIGA 500® BEYOND EVEN THE A3000!



GVP'S NEW A530-TURBO™ WITH 68EC030 CPU RUNNING AT A BLAZING 40MHZ!

Imagine running your software applications at 10 times the speed: your animations will play more smoothly, multitasking is more useful, your windows open and move more quickly and more...

Don't waste your hard earned money on a questionable and risky hard drive when you can own a GVP A500-HD8+ classic or New A530-TURBO. No matter what GVP solution you choose there is no doubt that you will be getting the fastest, most expandable and safest hard drive system you can buy for your A500!

Both the NEW A530 TURBO and A500-HD8+ are externally installed in a snap. It's simple, fast and worry free! And it doesn't void your warranty.

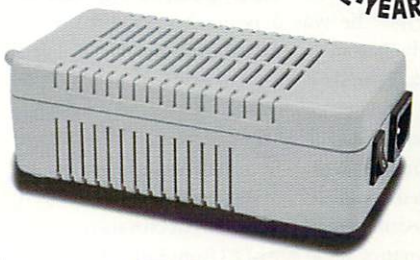
GET MORE FOR YOUR MONEY WITH GVP...

- Choose from a full range of factory tested hard disk drives up to 240MB.
- Speed increase is the key. Through GVP's custom chip and FAAASTROM™ technology, once unreachable performance is achieved.
 - GVP Custom Integration ensures greatest possible performance and reliability
 - Direct and instant access to up to 8MB of 32-Bit RAM on A530 Turbo and standard 8MB on A500-HD8+ Classic.
- Expandability is a must. GVP does not close the door for future expansion needs. Insure your investment with a GVP Hard Drive Solution:
 - Supports up to 7 external SCSI devices for tape backup, CD ROM Drive etc.
 - Add up to 8MB of FAST RAM for the A500-HD8+ or 8MB of blazing 32-Bit-Wide RAM for the A530-TURBO.
 - Run thousands of PC compatible software packages with the GVP A500 PC/286. This optional board incorporates state-of-the-art integration that opens a whole new computing world. Simply plug the GVP PC/286 into our exclusive "mini-slot" and you are off and running PC programs!
 - Optional socket for 68882 FPU in the New A530-TURBO to speed up rendering applications.
- Reliability and a company who stands behind their products is a given with any GVP product, and has made us the largest Amiga peripheral company in the world.
 - Free dedicated universal power supply included with both the A500-HD8+ and A530-Turbo. Don't even think about straining your A500 power supply.
 - Internal fan to ensure that your system stays cool.
 - 2-yr limited Factory Warranty on both the A500-HD8+ and A530 Turbo.
 - Game switch for the A500-HD8+ and Turbo switch for the A530-TURBO ensures full game compatibility.
 - The best technical support team in the business.

* Requires kickstart 1.3 or higher

REMEMBER: YOU ONLY WANT TO BUY ONE HARD DRIVE FOR YOUR A500. GVP MAKES SURE YOU DO IT RIGHT: CHOICE, SPEED, EXPANDABILITY AND RELIABILITY ARE BUILT IN... AND ONLY GVP GIVES YOU A FULL TWO-YEAR WARRANTY.

FACTORY INSTALLED & TESTED HARD DRIVE — GVP — 2-YEAR WARRANTY



Free Dedicated Universal Input Power Supply

GVP

GREAT VALLEY PRODUCTS, INC.
600 CLARK AVENUE
KING OF PRUSSIA, PA 19406
U.S.A.

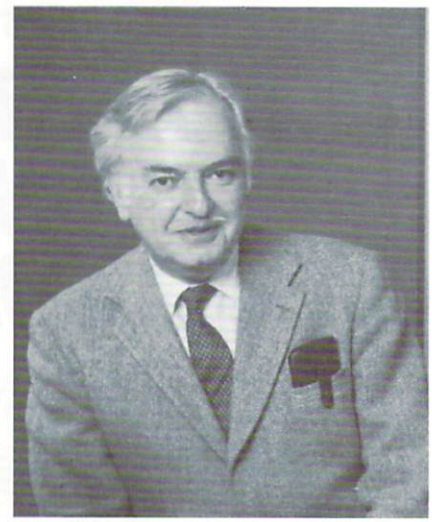
PHONE 215•337•8770
FAX 215•337•9922

For more information or your nearest GVP Dealer, call 215•337•8770. Dealer inquiries welcome. For technical support call 215•354•9495.

Amiga is a registered trademark of Commodore Amiga, Inc.
A500HD8+, A530 Turbo, and FAAASTROM are trademarks of Great Valley Products, Inc.
© 1992 Great Valley Products, Inc.

EDITORIAL CONTENT

Dr. John George Kemeny
In Memorium



Dr. John George Kemeny

Paul Castonguay, an *AC* author and supporter of True BASIC, called recently to tell me that Dr. John Kemeny had died. Like most people, I could not remember who Dr. Kemeny was. Paul quickly told me that he was a co-inventor of the BASIC computer language.

I contacted True BASIC Inc. for information on Dr. Kemeny. True BASIC Inc. is the company Dr. Kemeny and his BASIC co-inventor, Tom Kurtz, charged with the responsibility of providing a broad-based BASIC system. The result was True BASIC which can generate programs across different computer platforms.

The next day, I received a small envelope containing Dr. Kemeny's obituaries as they appeared in *The Guardian*, *Valley News*, *The New York Times*, and the *Boston Globe*. The short anecdotes compressed in these articles, written at his passing, tell the compelling story of Dr. Kemeny's life.

Born in Budapest, Hungary, on May 31, 1926, John Kemeny immigrated with his family to the United States in 1940. Although he had never heard a word of English until he was 13, he graduated at the top of his class from George Washington High School in New York in 1943. He went to Princeton and completed his undergraduate work in just three years, with an interruption of one year in which he was a research assistant on the Manhattan Project at Los Alamos. He received his United States citizenship in 1945.

After graduation, Mr. Kemeny was accepted as a mathematical assistant to Albert Einstein with whom he worked on the unified field theory at the Institute for Advanced Learning. He received his doctorate in mathematics at the age of 23 from Princeton. But it was Dartmouth he joined as a teacher and, at the age of 27, he was granted a full professorship. Yet even more astounding, he was appointed chairman of Dartmouth's Mathematics Department at just age 29.

With Dartmouth professor Tom Kurtz, he created the first time-sharing system for computer use. This allowed more people access to the large mainframe computer. The system became the model of systems around the country. In 1964 he again teamed with professor Kurtz and developed BASIC.

BASIC is short for Beginner's All Purpose Symbolic Instruction Code and its direction was to make computer power accessible to a wider group of people. Developed in 1964, the language became a central part of every microcomputer system created from the mid 70s until now. It is arguable that the personal computer would never have made its initial impact on the consumer and in business without this highly flexible, but easily understood language.

The Teacher

Dr. Kemeny was first, last, and always a teacher. When Dartmouth was searching for a new president, they asked Dr. Kemeny. When Dr. Kemeny stated that he would also like to teach one to two classes each term, the board firmly suggested that he would be too busy. Dr. Kemeny asked that if he had requested two hours off per week for other pursuits such as golf, would they have granted the time. The board accepted Kemeny and his request.

Dr. Kemeny had been president of Dartmouth for two months when he was faced with the same problems seen throughout the United States. The Vietnam War was slowly torturing the country and the main symptoms appeared on most university campuses. After the Kent State incident, Dr. Kemeny was faced with a growing unrest on the Dartmouth campus. Dr. Kemeny closed Dartmouth and lead the students in a week of mourning and soul searching. His actions defused the tensions on campus and saved Dartmouth thousands of dollars as well as giving the students a much-needed release.

Dr. Kemeny revitalized the original purpose of Dartmouth and actively recruited minorities, especially Native American Indians. He introduced co-education to the campus during the summer session in 1972 while maintaining the male student population. He held his post at Dartmouth until his retirement in 1981.

In 1979, Three Mile Island became the site of the United States' first recognized nuclear power plant disaster. President Jimmy Carter asked Dr. Kemeny to head the presidential commission responsible for the investigation of the accident. Dr. Kemeny was instrumental in the drafting of the commission's report which stated human error and a lack of proper controls were the cause of the accident. Dr. Kemeny was critical of the nuclear industry and the policies and procedures that had lead up to the accident.

Dr. Kemeny's experience with Three Mile Island also made him question the current system of American democracy. He argued for term limits on elective offices and expressed a hope that universities and government could work together on scientific questions.

The Twentieth Century Man

On December 26, 1992, Dr. Kemeny died of a heart attack at the age of 66. Dr. Kemeny was an inventor, teacher, philosopher, crusader, visionary, and innovator. He authored 13 books on subjects ranging from philosophy to mathematics.

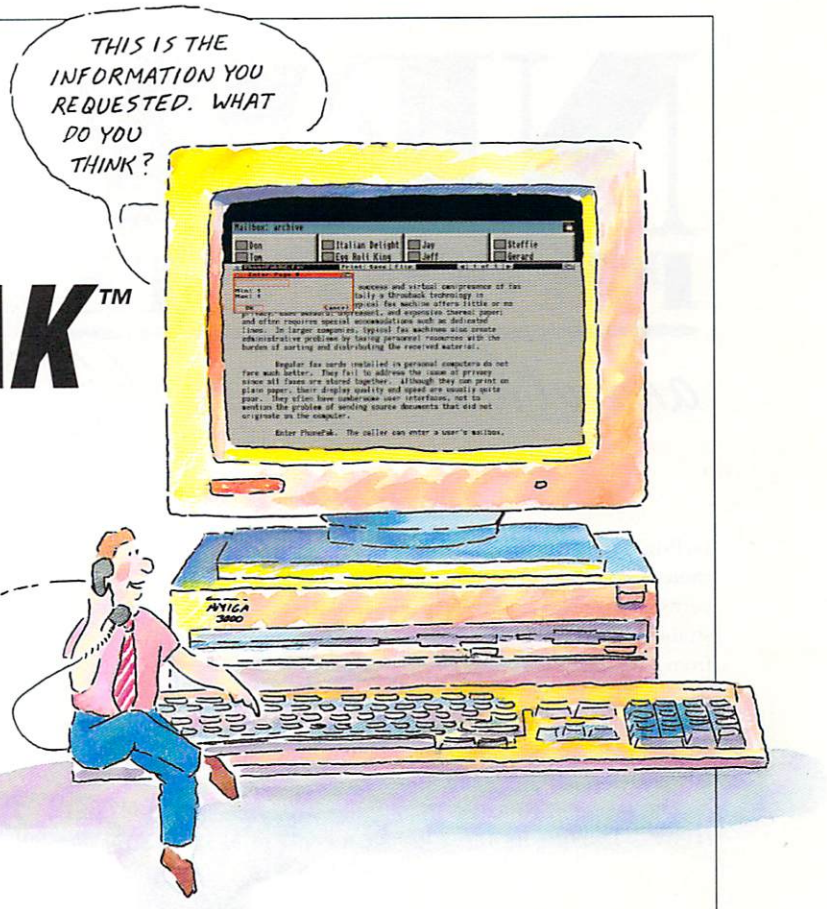
Dr. Kemeny participated in no small manner in the incidents, thoughts, and ideas that have shaped our world as we know it today. Dr. Kemeny drew upon his understanding, his intelligence, as well as his desire and continued to do his best to make a difference. Perhaps this is his last lesson to us all and his greatest legacy.

Sincerely,

Don Hicks
Managing Editor

Now, your Amiga® 2000/3000 is a Computer, Fax Machine, VoiceMail System, and Answering Machine all at once!

GVP's NEW PHONEPAK™



PHONEPAK'S EXCLUSIVE VFX™ TECHNOLOGY TAKES FAX AND VOICE MAIL INTO THE NEXT CENTURY!

You know what a fax machine IS. You know what an answering machine DOES. You know how voice mail WORKS.

Now imagine all that technology working together as a single comprehensive information system all on one board.

And that's just the beginning when it comes to what GVP's new PhonePak can do for your A2000/3000!

PhonePak Handles All Calls

With a PhonePak VFX system installed on each of your phone lines you can:

- Receive faxes and store them on your Amiga's hard disk for on-screen viewing and/or plain paper printing at your convenience.
- Use PhonePak's advanced digital technology to record and playback voice messages.
- Receive VFX™ messages combining voice and fax, from virtually any standard phone/fax machine.
- View a fax onscreen and listen to a voice message about that fax at the same time — a GVP multimedia breakthrough!
- Send faxes to one or more numbers immediately, or via PhonePak's built-in scheduler.
- Record and play your own voice messages in standard IFF audio format using a fully configurable system of private user mailboxes.
- Create customized databases for all your names, addresses, and telephone numbers.
- Use PhonePak's exclusive Operator™ script language or AREXX to control all dialing functions.

And because PhonePak uses GVP's custom DMA chip technology for multitasking, you can keep right on working, even while PhonePak is taking calls.

PhonePak Saves Time and Money

With PhonePak, you get a powerful, yet affordable, fax and voice messaging system that:

- Can be learned in no time with the simple, step-by-step user's manual.
- Completely eliminates costly and unwieldy thermal paper.
- Offers scaled, nonscaled, and inverted viewing of faxes in both HiRes (640x400) or Workbench 2.0's SuperHiRes (1280x400) mode.
- Intelligently transfers incoming calls over Centrex™ or other compatible phone networks.
- Lets the caller decide whether to leave a message or speak with the called party.

And, you get something no other fax machine or computerized fax product can offer — privacy for every fax received.

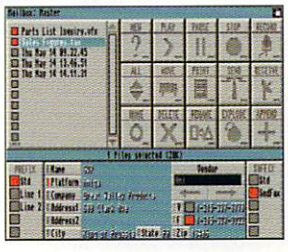
PhonePak Helps You Work Smarter

As you can see, anything fax machines, answering machines, and voicemail systems can do, PhonePak can do.

Plus, PhonePak is the only technology that gives you fax and voice information combined.

Whether you have a single phone line at home, or multiple lines in the office, once you install PhonePak, you'll wonder how you ever got along without it.

PHONEPAK™ VFX



Main PhonePak Control Panel

For more information on what GVP's PhonePak can do for you, call (215)337-8770 today.

GVP

GREAT VALLEY PRODUCTS
600 CLARK AVENUE
KING OF PRUSSIA, PA 19406
U.S.A.

PHONE 215•337•8770
FAX 215•337•9922

PhonePak requires 2MB RAM and a hard drive, and is FCC certified for use in the United States.

PhonePak, VFX and Operator™ are trademarks of Great Valley Products, Inc.
All other trademarks are the property of their respective owners.
© Copyright 1992 Great Valley Products, Inc.

Circle 112 on Reader Service card.

NEW PRODUCTS

and other neat stuff

1st Prize Toasted Fonts

1st Prize Toasted Fonts are the first choice for video art directors, advertising agencies, and television studios using the Video Toaster® from NewTek, Inc. Typefaces of a wide range of styles, from traditional to eclectic, with well formed letters for maximum legibility, and interchangeable sizes. *Allied Studios, 482 Hayes Street, SF, CA 94102, (415) 863-1781. Inquiry #231*

12 A'Clock

The Amiga 1200 computer is just about the perfect Amiga—except for one thing: it really needs a clock. Now you can easily and inexpensively have one by installing the MicroBotics 12 A'Clock ($34.95 with clock and lithium battery) board internally on the clock-header connector on the 1200 motherboard. 12 A'Clock is a simple-to-use peripheral that can automatically set your Amiga's system time and date upon startup. *MicroBotics, Inc., 1251 American Parkway, Richardson, TX 75081, (214) 437-5330. Inquiry #235*

A1230Turbo

Called the A1230Turbo ($499), this 40MHz 030 accelerator can be easily installed inside the expansion bay on the bottom of the A1200 computer. Two SIMM sockets allow for expansion of up to 32MB of 32-bit wide 60ns DRAM. The A1230Turbo also includes a socket for an optional FPU, which dramatically increases the performance of floating-point intensive applications. *Great Valley Products, Inc., 600 Clark Ave., King of Prussia, PA 19406, (215) 337-8770. Inquiry #204*

AV-8B Harrier Assault™

As commander of the Rapid Response Force, you must pilot a high tech Marine VSTOL aircraft carrier in this graphically griping game. You'll combine strategy and role playing as you set troop objectives, position your task force and fly harrowing support missions. *Domark Software, Inc., 1900 South Norfolk Street, Suite 202, San Mateo, CA 94403, (415) 513-8929. Inquiry #221*



Creepers

Creepers ($49.99) is another problem-solving game from Psygnosis. You must save the caterpillars from Boiling Oil or Hungry Blackbirds facing the machines, tools, fans, squishers, and bombs. Creeprs features over 70 levels, 16 soundrtacks, animated sequences every 10 levels, multiple difficulty grading, and multiscreen viewing. *Psygnosis Limited, 29 St. Mary's Ct, Brookline, MA 02146, (617) 731-3553. Inquiry #224*

Evoke! v1.0

At last, frame-accurate editing without investing a fortune. By combining any Amiga, the Sony® EVO-9650 VCR, and Evoke! (introductory price of $99) controller software; animators, sound recordists, and video producers have a formidable new creative tool. Extensive error checking keeps everything on track and the feedback edit-point display is completely accurate and trustworthy. *Ron D. Richardson, PO 52013, Edmonton Trail RPO, Calgary, Alberta, Canada T2E 8K9, Fax (403) 277-4061. Inquiry #205*

Flicker Blaster!

The Flicker Blaster! ($299) from Micro R.&D., is a new Amiga 500/2000 de-interlacer that takes care of the annoying high-resolution interlace flicker that Amiga users hate so much. The flicker blaster also removes the visible scan lines, the black lines, between each line of the non-interlaced Amiga display modes.

The Flicker Blaster! works with any VGA or Multisync monitor on the market. It's easy to install (about 10 minutes) and adjust to any monitor available. *Micro R. & D., P.O. Box 130, 721 "O" Street, Loup City, NE 68853, (308) 745-1243. Inquiry #206*

Hi-Fi Fonts

Hi-Fi Fonts ($67) is a six disk set of 67 typefaces each in 100 points. This package is designed for the 3-D program user with Pixel3D who wants a lot of variety at an economical price. *Allied Studios, 482 Hayes Street, SF, CA 94102, (415) 863-1781. Inquiry #230*

Hired Guns

Hired Guns is a four-player role-playing game in the first person. The five-disk game will also be available in AGA for the new Amiga 4000 and the Amiga 1200. The game is hard-disk installable, and contains 30 pieces of outstanding music. *Psygnosis Limited, 29 St. Mary's Ct, Brookline, MA 02146, (617) 731-3553. Inquiry #225*

Hot Foil Effects

This product produces bright metallic spot colors from black & white laser printers or slow-to-medium speed copy machines.

Low-cost packages can colorize more than 400 average letterheads at a price of less than ten cents each. If your machine can process heavier weight cover or card stock you can make impressive business cards in small quantities as you need them. Popular solid metallic colors and silver holographic patterns that shine with rainbow sparkles are available. *Allied Studios, 482 Hayes Street, SF, CA 94102, (415) 863-1781. Inquiry #233*

MBX 1200z

The MicroBotics MBX 1200z (SRP of $189) is offered to Amiga 1200 owners as a cost-effective, high-quality upgrade solution to provide a Motorola 68881/68882 Floating Point Unit and to support the installation of up to 8MB of 32-bit wide Amiga FastRAM. In addition, a high-accuracy, battery-backed realtime clock circuit is supported. The MBX 1200z board installs internally on the Amiga 1200's standard 150-pin bus expansion connector. *MicroBotics, Inc., 1251 American Parkway, Richardson, TX 75081, (214) 437-5330. Inquiry #234*

The Miracle Piano Teaching System™

The Miracle Piano Teaching System™, the first piano which teaches users how to play, has 1,000 piano lessons with fun and exciting video games and popular songs. The system comes with built-in stereo speakers, AC Adapter, and earphones. The keyboard has velocity-sensitive keys, a sustain pedal, and full MIDI compatibility. It can produce over 100 exciting digital music instrument sounds. The Miracle, with its three components—software, a 49-key keyboard, and a cable connection to the user's computer—has a suggested retail price of $479.95. *The Software Toolworks, Inc., 60 Leveroni Ct, Novato, CA 94949, (415) 883-3000. Inquiry #207*

My Paint Version 2.0

The My Paint program disk comes with a built-in "Video Coloring Book" of 28 drawings for children to color, plus the ability for children to create their own drawings. Fun sounds or digitized speech accompany each coloring book drawing. Other tools that make

Introducing ImageFX™...
No professional art department should be without it

Only ImageFX gives your imagination total image processing freedom.

Whatever visual medium you work in—photography, graphics, video, animation—ImageFX is the one tool you absolutely must own!

IMAGE FX™



It's like having a professional art department at your fingertips.

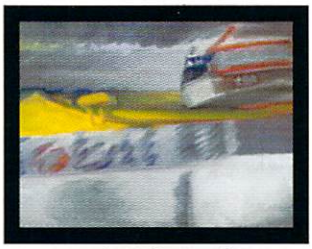
ImageFX is faster, easier to use, more expandable, more adaptable and more powerful than any other product of its kind for the Amiga®.

Here are just a few ways ImageFX expands your visual horizons:

★ Scan in or framegrab from a full range of image capturing devices directly into your Amiga.

★ Use your Amiga as an image prepress, color correction system including, CMYK, RGB, HSV and YUV.

★ Digitally retouch any image with the most complete set of filters, color gradients, image distortions, masks, and text handling tools available.



Carsmear by Mike Vunck

★ Automatically convert image files to/from over 20 different file formats.

★ Create true, full motion polymorphic "morphing" animation just like they use in movies, commercials and music videos.

★ Generate single and dual image morphs; wave, ripple and spiral effects; water and glass-like distortions; and a wide range of 24-bit transitions.

★ Make your own add-on features with full ARexx™ and C programming language support.

★ Enjoy near "real time" painting in 24-bit color.

ImageFX is the most exciting and versatile full color, image processing and enhancement system ever made.

You owe it to your imagination to buy ImageFX.

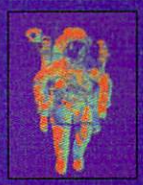
Image Processing
★ Regional Processing
★ Anti-Aliasing
★ Composite Imaging
★ RGB, CMYK, HVS Adjustments
★ Contrast, Gamma Adjustment

Special Effects
★ Full Motion Morphs
★ Single/Dual Image Morphs
★ 24-Bit Transitions
★ Waves and Ripple Effects
★ Spiral Effects
★ Water/Glass Distortion

Image Rendering
★ Amiga, ECS/AGA Modes
★ HAM-E, DCTV, GIF
★ Multiple Dither Controls
★ IV24, FC24, EGS 24-Bit Output

...and much more













Give your Amiga graphics and animations new magical powers — at an affordable price!

If you need ImageFX™ morphing power alone, CineMorph is for you.

CineMorph transforms any image, or images, from one to another quickly, easily and with the professional quality "morph" results you see at the movies and on TV.

With **CineMorph** you can:

★ Warp single or motion images, create full motion morphs, merge scenes, and perform digital dissolves.

★ Set different speeds for different parts of the morph.

★ Work quickly and easily with Amiga style controls, then output directly to any Amiga, DCTV™, or HAM-E™ systems — including 24-bit display boards like GVP's IV24™.



Remember: When you're in the market for morphing, and only morphing, **CineMorph** is the maximum performance morph power.

CineMorph is the must-buy morph software.

cinemorph™

Amiga is a registered trademark of Commodore-Amiga, Inc. ImageFx, CineMorph, and IV24 are trademarks of Great Valley Products, Inc. All other trademarks are the property of their respective owners. © Copyright 1992 Great Valley Products, Inc.

GVP

For more information or your nearest GVP Dealer, phone 215-337-8770 today.
For technical information call 215-354-9495

GREAT VALLEY PRODUCTS, INC. PHONE 215•337•8770
600 CLARK AVENUE KING OF PRUSSIA, PA 19406 U.S.A. FAX 215•337•9922

NEW PRODUCTS
and other neat stuff

learning fun are multiple paint brush sizes, special "surprise" picture mode, mirroring mode, color cycling and more

This newest version of My Paint ($49.95) comes with "Alphabet Fun!" which is a supplemental "Video Coloring Book disk" with an additional 26 drawings to color in. Each letter of the alphabet is spoken and displayed next to a drawing of an object beginning with the letter. *Saddleback Graphics, 12812 Garden Grove Blvd. Unit P, Garden Grove, CA 92643, (714) 741-7093. Inquiry #208*

Shadowlands™

You are a warrior prince on a journey through the largest, strangest and most fascinating world ever seen in a role-playing game. Use your supernatural powers to control the minds of others. An intuitive contol system, revolutionary Photoscape™ lighting and a unique movement system make this game both fun and facinating to play. *Domark Software, Inc., 1900 South Norfolk Street, Suite 202, San Mateo, CA 94403, (415) 513-8929. Inquiry #222*

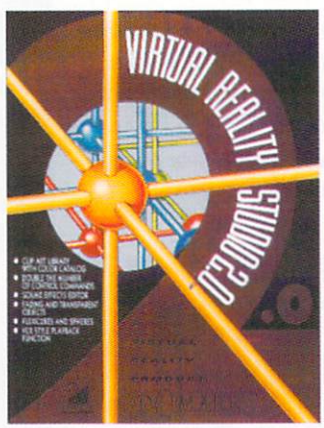


Star Deck Deep Space Mine

Star Deck Deep Space Mine ($14.95) is a font based on the new *StarTrek* spinoff *Deep Space Nine.* The series screen-credits font in VideoToaster®, AmigaDOS Standard, ColorFonts®, ProPage® Postscript, and PageStream® Postscript, all on one promotional disk. *Allied Studios, 482 Hayes Street, SF, CA 94102, (415) 863-1781. Inquiry #232*

Virtual Reality Studio 2.0™

An amazing leap forward in software technology, Virtual Reality 2.0 ($99.95) boasts exciting new features that put this journey into the future at the leading edge of virtual reality. Cars, houses, boats, trees, furniture—all the 3-D objects you need to form the basis of a virtual world. *Domark Software, Inc., 1900 South Norfolk Street, Suite 202, San Mateo, CA 94403, (415) 513-8929. Inquiry #223*



Walker

Walker ($49.95) is a fast-paced shooting adventure to save a post-apocalyptic world. Walker excels in detailed artwork and smooth animation, evident in the way the Walker "head" tracks the crosshairs of the firing control. Gun temperature, shield strength, and more are a major consideration in game play. *Psygnosis Limited, 29 St. Mary's Ct, Brookline, MA 02146, (617) 731-3553. Inquiry #226*

Word Construction Set

This software ($46.75) presents to the student over 1000 words to be built by word and sound parts or phonetic "chunks." A word is spoken in the context of a visible sentence, and a graphic depicting the meaning of the word is displayed. The student is then able to assemble a given word from beginning, middle, and ending sounded parts. Full word experimentation is encouraged by allowing a new word to be assembled from different groups of sounds and tested in a sentence.

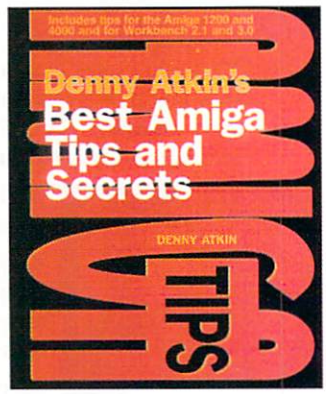
Student progress is measured by the successful construction of Seven Building Sites—each unique illustrated building representing different ways of approaching words. As each word is successfully made at a particular construction site, a part of the framework of the building is filled in by an animated crane until the whole building is revealed. *Lascelles Productions, 401 Lascelles St., P.O. Box 959, Hastings New Zealand, (011) 64-6-878-9652. Inquiry #209*



•Books•

Denny Atkin's Best Amiga Tips and Secrets

Whether it's adding a CD-ROM drive, getting the best performance from a game, or learning how to transfer data from the Amiga to a PC, Amiga users will find this book invaluable. Written in a clear and concise style, Denny Atkin's Best Amiga Tips and Secrets ($19.95) has the answers to the questions Amiga users need most. Included is a collection of valuable tips such as how to get more RAM at no cost, how to get rid of screen flicker, how to make an Amiga emulate a Macintosh or PC, and much more. *Compute Publications International Ltd., 324 West Wendover Ave., Greensboro, NC 27408, (919) 275-9809. Inquiry #210*



•Other Neat Stuff•

Bigfoot Power Supply

Bigfoot Power Supply (List price of $129) is compatible with the Amiga 500 and 600 and the new Amiga 1200. The Bigfoot is in a white matching enclosure and provides a full 200 Watts of clean, fan-cooled power for the Amiga user. Ideal for the expanded Amiga. *Micro R. & D., P.O. Box 130, 721 "O" Street, Loup City, NE 68853, (308) 745-1234. Inquiry 211*

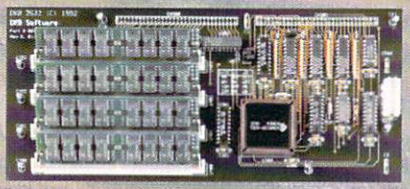
Creative Equipment International Announces Agreement with CBM

CEI announces an agreement with Commodore Business Machines, Inc of West Chester, PA to distribute the Commodore line of Amiga and PC computers and peripherals in the United States. This agreement gives CEI "National Aggregator" status and follows a recent Latin American distribution agreement between the two companies earlier in 1992. *Chuck Schenk, Vice President of Marketing, 6864 West Flagler Street, Miami, FL 33144, (305) 261-2544. Inquiry #212*

Complete your Amiga with the latest hardware from DKB

DKB 2632™

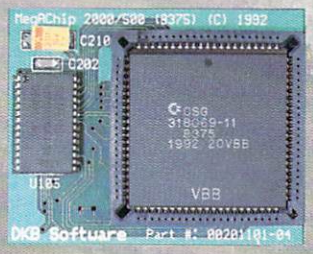
112 Megabytes of RAM for the Amiga A2500 and the A2630



- Now you can go beyond 4 Megabytes of 32 Bit memory.
- Expandable up to 112 Megabytes of 32 Bit memory.
- State-of-the-Art design breaks the 32 Megabyte limit and allows the use of different size memory modules in the same bank.
- Using 32 Bit wide SIMM modules enables you to install only one module to add up to 32 Megabytes at a time, modules are available in 1, 2, 4, 8, 16, and 32 Megabytes.
- Installs onto the CBM A2630 Accelerator card and the IVS Vector 030-25
- Does not use autoconfig space, uses 32 Bit address space so that you can still use your AT Bridgeboard with more than 6 Megs of Fast RAM.
- Excellent for Desktop Video, Desktop Publishing and Multimedia applications.
- Fully compatible with Workbench™ 1.2, 1.3, and 2.0.
- Compatible with the MegAChip 2000/500™ and MultiStart II™ ROM board.
- Compatible with the Vector 030-25 accelerator from IVS.
- Compatible with the Video Toaster system, Amiga A2500, A2000HDA/100.
- Compatible with the CSA Rocket Launcher™ 50MHz upgrade for the A2630 accelerator card.

MegAChip 2000/500™

2 Megabytes of Chip RAM for the Amiga A2000, A500, CDTV & Video Toaster



"The MegAChip 2000/500 should be standard equipment on every Video Toaster System."

Jim Plant - Publisher/Editor Video Toaster User

"The MegAChip 2000/500 is a must own for anyone that wants to use Toaster Paint™ or Multitask with the Video Toaster."

Lee Stranahan - Writer of the Video Toaster 2.0 manual Tutorials also featured in the Desktop Images Video Toaster Tutorial tapes.

"I would advise Toaster users who make use of Toaster Paint or LightWave™ to add DKB's MegAChip 2000/500 to your system as soon as possible."

Tim Doherty - Video Toaster User

The MegAChip 2000/500 allows you to upgrade your Video Toaster, Amiga A2000, A500, and CDTV™ to 2 Megabytes of Graphics Memory.

The MegAChip 2000/500 is a needed addition to your system if you are working with Desktop Video, 3D Rendering & Animation, 24-Bit Paint, Multimedia or Desktop Publishing.

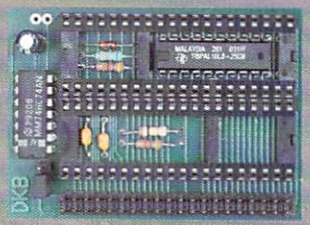
Scala MultiMedia 200 requires 2MB of Chip RAM which means an A500 or A2000 needs a MegAChip 2000/500 installed to use this software

Fully compatible with the Video Toaster™, OpalVision™, VLab™, IV-24™, DCTV™, Ham-E™, and most genlocks and framebuffers.

Fully compatible with most 68030 and 68040 accelerator cards.

MultiStart II™

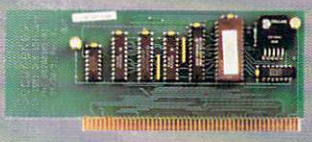
For the A500, A600 & A2000



Allows A500 A600 and A2000 owners to install Kickstart V2.0 and V1.3 ROMs and switch between them with the keyboard. No software required for operation. Lets you stay compatible with your software. No external wires or switches required. This MultiStart is compatible with the MegAChip 2000/500, VXL030,, and CSA MMR accelerators for the A500 and also most other products that install inside the A500. This is the ROM switcher that Commodore Amiga Technical Support sells to developers.

SecureKey™

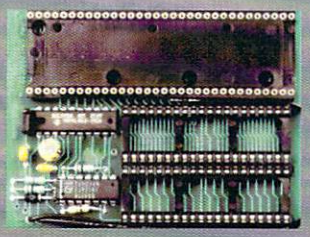
Access Control System For The A2000 & A3000



The SecureKey is a hardware security device that installs in any A2000 or A3000 or Video Toaster system. The SecureKey allows you to have one access code for your Amiga. The SecureKey will not allow access to your Amiga without the right security code, period. You can't boot off of a floppy or bypass it in any manner. If you need to keep your system safe from unauthorized use - Want to make sure that no one can delete files from your harddrive or steal your work then you need the SecureKey. This means that if your system has files such as animations, documents, presentations, C code, or any type of confidential information, you can be assured that the files on your harddrive are safe. Keep your Amiga safe from those that may otherwise unknowingly destroy your information. Requires Kickstart V1.3 or above. The SecureKey is fully compatible with Kickstart V2.0.

KwikStart II™

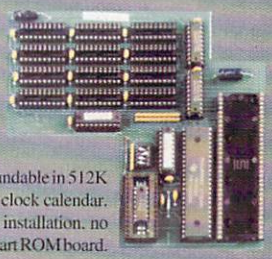
Use Kicksart 2.0 in your Amiga A1000



Allows A1000 owners to install V1.3 and V2.0 Kickstart™ ROMs and switch between them. Upgrade to the latest operating system and still be compatible with software that requires Kickstart V1.3. Use the latest V2.0 operating system without using up your system memory. Fully compatible with Kickstart V2.0 and Workbench V2.0. Uses standard Commodore ROMs for easy upgrades. Allows you to boot faster because you only need to load Workbench. Works with Kickstart V2.0, V1.3, and V1.2. Compatible with the Insider memory expansion boards. Also compatible with most processor accelerators. Keyboard switchable between two ROMs or between one ROM and disk based Kickstart. No external wires or switches required

Insider II™

1.5 Meg in the A1000



From the maker of the first internal RAM board for the Amiga 1000: the original Insider™ by DKB Software. Allows A1000 owners to add up to 1.5 Megs of Fast RAM internally. User expandable in 512K increments using 256K x 4 DRAMs. Includes battery-backed clock calendar. Comes with software for the clock and testing RAM. Simple installation, no soldering required. The Insider II is compatible with the KwikStart ROM board. Also compatible with most processor accelerators.

DKB Software
50240 W.Pontiac Tr.
Wixom, MI 48393
Sales (313) 960-8751
FAX (313) 960-8752
Technical Support (313) 960-8750

Contact your local dealer or call for information.

MegAChip 2000/500 is a trademark of DKB Software. Video Toaster is a trademark of Newtek, Inc. CDTV, A500, and A2000 are trademarks of Commodore-Amiga, Inc. IV-24 is a trademark of Great Valley Products, Inc. DCTV is a trademark of Digital Creations. Ham-E is a trademark of Black Belt Systems. OpalVision is a trademark of Centaur Development.

All Products come with a Full One-Year Warranty. Dealer inquiries welcome.



Circle 160 on Reader Service card.

Authors!

Amazing Computing for the Commodore Amiga and ***AC's TECH*** are looking for Amiga users who are interested in writing articles for publication. We need programming articles, tutorials on popular software packages, how-to's, and product reviews.

For a free set of writer's guidelines, call:

1-800-345-3360

Don't wait, call now!

NEW PRODUCTS
and other neat stuff

GVP Announces Upgrades for ImageFX and CineMorph

CineMorph has had new gadgets added to the curve editor window which allow for greater flexibility. In addition, AGA support has been added to the Render menu.

The new version of ImageFX also adds AGA preview and render modes, more keyboard shortcuts, and an improved file requester to its impressive list of features and now also includes an Opal Vision render module.

Registered owners of ImageFX and Cinemorph are entitled to receive these upgrades at no charge. *Great Valley Products, Inc., 600 Clark Ave., King of Prussia, PA 19406, (215) 337-8770. Inquiry #213*

Migraph Announces AGA Compatible Software

Migraph, Inc. announces the release of new versions of its popular scanning software, Touch-up, Migraph OCR, and OCR Jr., designed to ensure compatibility with Workbench v3 and the new AGA chipset used in the Amiga A1200 computers. The new versions are: Touch-Up v3.1; Migraph OCR and OCR Jr. v1.4. Existing owners of either Touch-Up 3.0 or OCR 1.3 are eligible for a free upgrade direct through Migraph. *Migraph, Inc., 32700 Pacific Highway S., Suite 12, Federal Way, WA 98003, (206) 838-4677. Inquiry #214*

PLAYFIELD! AMOS Newsletter Now Monthly

Due to many excellent subscriber contributions, PLAYFIELD!, the newsletter for AMOS programmers, is now able to print monthly issues. The subscription price remains at $24 a year and sample copies are available for $1. PLAYFIELD! publishes all the best AMOS-specific information you will find anywhere. Each issue includes news, reviews, tutorials, a PD library, and lots of great code. *PLAYFIELD!, 1836 SW 50th Terrace, Cape Coral, FL 33914. Inquiry #215*

Software of the Month Club

AMC's Clip Art club has changed so drastically, that you can consider it to be a totally new club. Under their new name, SMC ArtWorks, they are offering images more diverse in subject and style, with a crisper, cleaner look. Besides the Image Guide sent with each volume, ArtWorks members also receive a "Bright Ideas" booklet, covering tips, tricks and techniques to enhance our members' graphic work.

The Art Gallery Collection, a continuing feature, has also been expanded. SMC offers previously-published clip art images by subject, now with five new titles. As an extra incentive, one Art Gallery will be given away free to new members. *Software of the Month Club®, 2180 Las Palmas Drive, Carlsbad, CA 92009, (619) 931-8383. Inquiry #216*

•AC•

New Products and Other Neat Stuff is compiled by Elizabeth Harris

Correction:

The correct address for Video Speak Systems (v8.2, Editorial, p.6) is as follows:

David Spence
Video Speak Systems
799 Highway 72E
Collierville, TN 38017
(901) 853-4401
BBS: 901 853 4804

SEE US AT world of commodore AMIGA NEW YORK CITY • APRIL 2-4, 1993

Amiga® 4000 And 1200 Computers Are Priced To Fly.









Watch your computing capabilities soar with the new Amiga® 4000 and 1200.

Save up to $1,500* on the A4000, including DeluxePaint® IV AGA and Art Department Professional® software. Save up to $440* on the new A1200, including DeluxePaint IV AGA and Final Copy® 1.3 word processing software.

Both computers feature the Advanced Graphics Architecture™ that lets you display and animate graphics from a palette of 16.8 million colors. You also get a 24-hour Helpline and optional on-site service.** This offer is only good from January 1, 1993 through March 31, 1993. So take off for your Amiga dealer today. Or, call 1-800-66 AMIGA.



Commodore® AMIGA®

© 1992 Commodore Business Machines Inc., Commodore, the Commodore logo, and Advanced Graphics Architecture are trademarks of Commodore Electronics Ltd. Amiga is a trademark of Commodore-Amiga, Inc. DeluxePaint is a registered trademark of Electronic Arts. Art Department Professional is a registered trademark of ASDG Inc. Final Copy is a trademark of Softwood Inc. *Based on MSRP of $1047 for the A1200 bundle and $4193 for the A4000 bundle. **Available only on systems purchased in the U. S. through an authorized Commodore-Amiga dealer. Customer activation required. Nominal fee for some options.

Circle 109 on Reader Service card.

REVIEWS

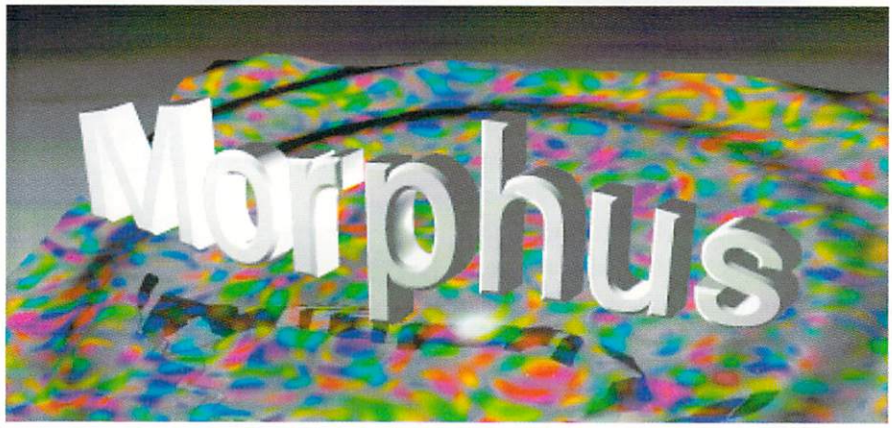
Morphus

by Frank McMahon

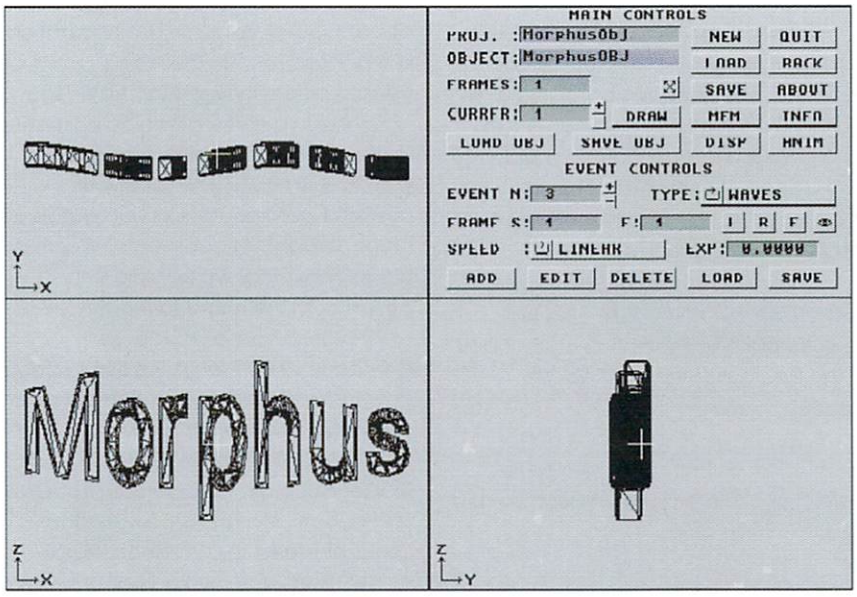
Imagine by Impulse has evolved over the years and so has its supplemental material. With everything from object disks to manuals to textures, the typical Imagine user has benefited from a wealth of productive add-ons. Yet another has appeared, this one coming from overseas (specifically Italy) entitled *Morphus*. The title alone implies that it is another in a growing field of "morphing" software, designed to change one object to another. Although the program does feature specific options of this nature it is not a morphing program. It is more an object manipulation tool that lets the user create an event, or series of events, over the span of animation frames such as twisting, shearing, waves, bending, scaling, and yes, morphing.

The package can be run from floppy or installed easily on a hard drive and consists of four separate programs. We'll get to the other three in a bit, but first the main program. As the main screen opens up, a requester appears letting the user specify the maximum amount of points and edges. The default is 1000, but on my 9MB Amiga I could have up to 300,000. Obviously the more you specify the higher the memory requirements. Conversely this allows even a user with a 1MB Amiga 500 to take advantage of the program. The main interface is comprised of four separate windows, three of which are the familiar tri-views that show the object loaded from the top, front, and side. I should point out that redraws of objects will generally be spiffier the faster your machine is. While the program does not take up nearly as much memory as Imagine itself, an accelerated Amiga is preferred for fast screen updates, animation creation, as well as calculations. The top of the screen lists the name of the current Morphus project that contains the events or transformations. A specific project can contain up to 9,999 frames and up to 50 different events. An event is a change in the current object that occurs over time, like a wave or a twist for example. Events can occur one after one another or *at the same time*. Creating multiple events to the same object can quickly produce incredible transformations until now only seen on the big screen. The events available are translations, scale, rotate, shear, taper, twist, bend, radical bend, waves, and metamorph. Each event contains a large array of options such as scale, angle, and phase which gives the user an incredible amount of versatility. Experimentation is mandatory since it's very easy to quickly become overwhelmed by all the numerical requesters.

After loading in a standard Imagine (TDDD) object, it's simply a matter of choosing what event is going to be performed. There are several precalculated events that serve as a tutorial which are included on the disk. After you have set all the parameters, you can choose to preview the animation. Options include real-time, which provides a real-time wireframe rendering of the animation in one window or all three. ILBM is similar but it saves the individual frames to disk so they can be loaded and examined in a program such as *Deluxe Paint IV*. An ANIM option saves a standard compressed Anim-5 animation to disk. And finally there is the TDDD option which most Imagine users will want. It saves a series of objects to a specified directory, numbered sequentially, that plays out the event. This in turn is incorporated into your Stage editor inside Imagine. The main interface also has a gadget for saving objects in addition to loading them. Say you didn't necessarily want to create an animation but you merely wanted to add some waves to a flat plain you constructed. Morphus will do that and save it as a single object. Other gadgets include buttons that trigger a complete redraw of the screen, list info about a project, show memory used, and one that activates and deactivates a fast clipping algorithm. There is a center gadget as well as a zoom and pan control for precise positioning of the current display. You can also loop your events or have them follow one another. The manual includes a short tutorial that gets you up and running with your first event. The



package includes two programs titled ShoWaves and Visualizer, which show many of the wave effects in real-time that can be achieved. Also included is an extremely handy program called StageGen. Now I mentioned that the Morphus program creates a series of objects that carry out the event. To incorporate them into your Imagine program can be quite time consuming, you basically have to add one by one in the Action menu—rather tedious for a 200-frame animation. StageGen does it all automatically by taking a Morphus project and incorporating it into a standard Imagine staging file. Very handy.



While Morphus is certainly an amazing program, I still have many reservations about it. Although the manual is direct and to the point, its 39 pages barely scratch the surface in what can be accomplished. Technical jargon is tossed about making the manual more a math textbook than software reference. There is one lone tutorial which is not nearly enough for a program with this many options. When you choose to save an animation, the program merely saves the entire screen, so your animation includes requesters and icons. Plus the program really goes about creating animated effects in a roundabout way. Imagine users are accustomed to simply choosing an FX (like rotate) from within the Imagine Action editor. It certainly would be nice for this program to create new FX that can be used on different objects and passed around on bulletin boards. Instead this program creates a separate object for each frame, quickly filling up your hard drive partition. Like Imagine itself, this program is filled with numerical requesters. You will never switch from mouse to keyboard back to mouse in any other Amiga program. Good points? I've always wished there was a program that could create waves easily and this is it. Its wave-generation capabilities are worth the purchase price alone. Aside from the keyboard/mouse problem, this is one nicely designed program. It's cleanly laid out and easy to get around in. It completely avoids standard Amiga menus and requesters but it has a nice feel. Also, this program is extremely powerful. If you are willing to spend a lot of time experimenting, you'll come up with a vast array of spectacular effects. I may be giving the impression that the program is hard to use; actually it's pretty easy for most Imagine veterans. The problem lies in heading the user in the right direction with solid tutorials and more detailed reference. If you don't mind rolling up your sleeves and doing it on your own, Morphus makes a powerful companion to Imagine.

Morphus
Impulse, Inc.
8416 Xerxes Avenue North
Brooklyn Park, MN 55444
(612) 425-0557
Inquiry #217

CanDo

Rob Hays

With the advent of 32-bit processors, AmigaDOS 2.0 and 3.0, and Commodore's abandonment of AmigaBASIC, the casual programmer has been in a real bind. True, there are other programming options besides BASIC, but for that quick-and-dirty program that will still get the job done, most require too great an investment in time learning what amounts to a foreign language. *CanDo*, from INOVAtronics, fills the needs of the casual programmer, and yet has enough power to produce commercial-level programs.

CanDo applications are called decks, which are made up of one or more cards. Each card can perform, or control, one or more functions, allowing, for instance, the user to input or read data, or import or export information to or from other cards in his deck. Cards can contain gadgets to click, requesters to load files, and just about everything else Amiga users expect from a program. Creating a deck can be done almost without removing your hand from the mouse. Everything is handled through a series of requesters and buttons. Suppose your deck needs a button for the user to click, which will then display a message. On CanDo's main control panel, click on the Add button, then the Button Icon. Move the mouse to your card, above the control panel window, click the left mouse button and drag out the size and shape of button you want. A requester pops up allowing you to choose the appearance of the button, then another requester that allows you to determine the action to take place when the user clicks your button. Click on the text icon and you can choose not only what your message will be, but which font, what size, and what color it will be displayed in. Choose where on the screen your message will be, and you're done.

In less than a minute, you've accomplished something that would probably take at least a hundred lines of assembler code and an hour of typing, assuming no typos! And if you change your mind about something, click on Edit,

then on your button, and you can go through the requesters again and make the changes you want. Menus, screens, and other objects are all handled in the same manner. When you have your deck operating the way you want, there are two different ways to finish, depending on whether you intend it to be used only by other owners of CanDo, or by anyone.

Finishing your deck is called binding. The binding process can either add a small amount of code, requiring the main CanDo program itself in order to run, or it can add a larger section of code to create a stand-alone deck. This can be given or sold to any Amiga owner to use, and doesn't require them to purchase CanDo. To their credit, INOVAtronics places no restrictions on decks such as these, and does not require any payment or licensing fees.

CanDo includes a myriad of functions for working with images, sounds, and Amiga events. For instance, it is a simple matter to create a deck that plays a sound sample whenever the user inserts or removes a disk. If a set amount of time passes without any action, you can give them a digitized razz! ARexx ports allow for interprocess communication, and direct control of the serial and parallel ports is possible. This allows your deck to control other devices such as video disk players for multimedia applications.

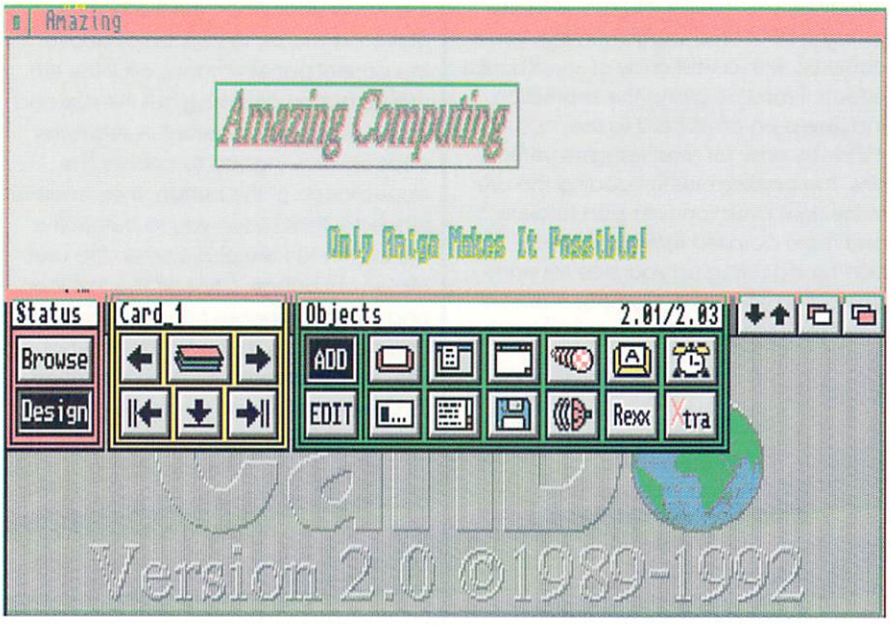
This is version 2.0 of CanDo, and corrects what was one of the greatest shortcomings of the earlier versions—the manual. The new manual is more than 400 pages in a three-ring binder. Two detailed tutorials walk the new user through the processes involved in creating decks. Fully half of the manual is devoted to detailed descriptions of the scripting commands and functions available, and an index brings up the rear.

CanDo requires a minimum of 1MB of RAM, two floppy drives, and Workbench 1.3 or higher. While working with CanDo on a 25MHz A-3000 with a fast hard drive is a joy, be warned that using it on a floppy-based A-500 requires a lot of patience. It seems as if every action requires a wait for disk access.

CanDo comes on three floppies, and includes Commodore's Installer utility for painless installation of all or part of the files to either a hard disk or floppies.

If you have an idea for a killer application, but no desire or time to learn C or assembly, pick up CanDo and do it!

CanDo v2.0
INOVAtronics, Inc.
8499 Greenville Ave., Ste. 209B
Dallas, TX 75231
(214) 340-4991
Inquiry #218



MaxiPlan 4

by Rick Broida

It's no secret that Amiga computers have never been the number-one choice of the business world. The reasons for this are the subject of a much larger debate, but one factor remains etched in magnetic media: there's a paucity of good business software for the Amiga.

When you think graphics, animation, music, video, and all the creative arts, you think Amiga. But what about powerful word processors and database managers and spreadsheets? Where is the software that will transplant the Amiga from the home to the office?

For starters, look to The Disc Company's *MaxiPlan 4*. Predominately a powerful spreadsheet but also a simple database manager, MaxiPlan allows users to create budget plans, perform market research, consider tax strategies, and accomplish any other tasks that a comprehensive spreadsheet affords.

Let's say you own a small business and want to keep a record of daily sales. Your spreadsheet format could be that of a monthly calendar, and each day you'd enter the total number of sales and the total dollar amount for that day. At the end of the month you could generate reports indicating daily sales averages, total profit for the month, and who your best salesperson is. Better still, hard copies of these reports can be produced in a variety of formats, from simple numerical tallies to colorful pie charts to complex line graphs.

A MaxiPlan worksheet can have up to 512 columns and 32,760 rows. That puts it in line with many of the heavy hitters in the IBM world. Moreover, MaxiPlan allows the import and export of *Lotus 1-2-3* data, so if you have an IBM or compatible at work and an Amiga at home, the data can be transferred with ease. All that's needed on the Amiga end is a utility like CrossDOS, which allows IBM-formatted diskettes to be read in Amiga disk drives.

One of MaxiPlan's more intriguing features is its ability to verbalize a cell or range of cells. Using the Amiga's inherent

speech capabilities, MaxiPlan will read aloud any user-selected data. As we all know, the Amiga articulates about as well as Arnold Schwarzenegger after a few drinks, but such a speech feature is foreign to the IBM world and could prove useful to the visually impaired.

MaxiPlan's real power, however, lies in its massive array of built-in functions. Your data is only as useful as the results it can produce, and MaxiPlan produces in spades. One click on the function button produces a Function Selector requester, and it is here that you can assign mathematical expressions (such as sum of matching entries, cosine, net present value and so on) and database instructions to the worksheet cells. Function-assigned cells can also be linked to other Worksheets, meaning that the results from one set of data can be compared with or added to the results of another set of data.

Once all the data has been organized, MaxiPlan makes a snap out of generating charts and graphs. Of the 12 varieties available, the bar and line charts have the added feature of two-way dynamic data linkage. In the past, only numerical data could be modified; then the chart would change accordingly. Now it works both ways: you can alter the charts themselves, raising or lowering bars and lines, and the numerical data in your worksheet will reflect the changes. Charts may be titled, legends created, axes controlled. Unfortunately, text is restricted to Amiga fonts, but because charts can be saved as IFF files and imported into, say, a desktop publishing or painting program, all is not lost.

What does seem unforgivable is that charts can be created with a maximum of only 16 colors. This adds to the irony of Amiga's perpetual business-market failure. While it's great that MaxiPlan is so versatile, it should go the extra step of taking full advantage of the Amiga's graphics capabilities. That's what will help the business world sit up and take notice.

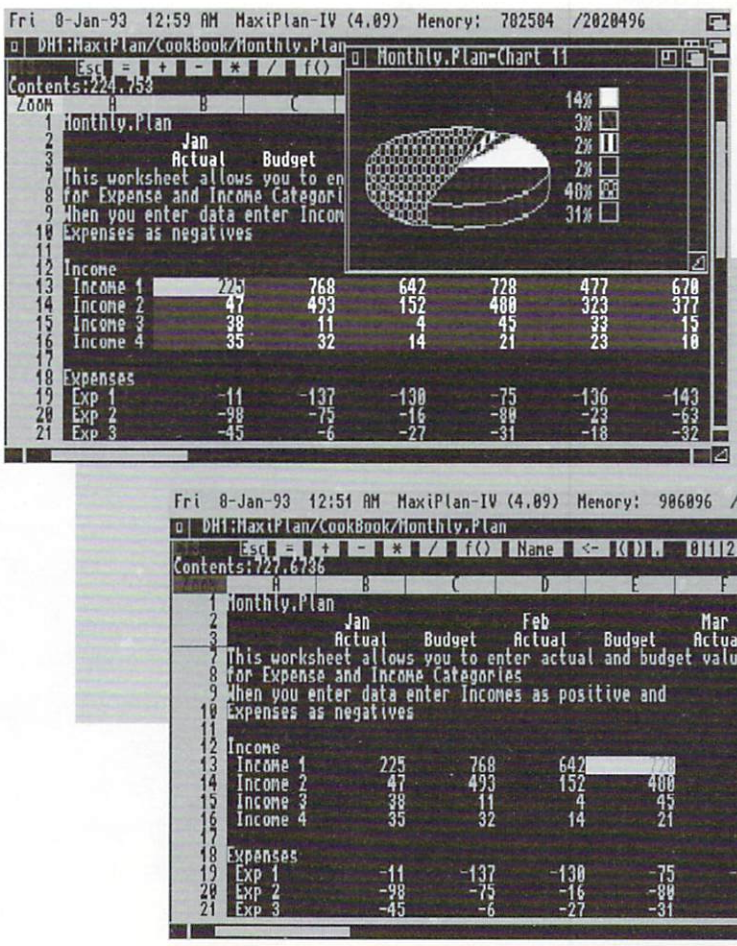
MaxiPlan does offer extensive macro features. A macro is a mini-program created by the user to help with repetitive or time-consuming tasks. For instance, one of the sample macros listed in the MaxiPlan manual searches a string of data, extracts all matching data therein, then prints it. And because the macros can utilize MaxiPlan's built-in formulas, there are upwards of 200 instruction functions available for their creation.

Printing MaxiPlan worksheets or charts is no different from printing in any other program; the software relies on Workbench Preferences for its settings. While there are a number of valuable print features included, such as an on-screen print preview, one glaring omission is the ability to print sideways. True, Workbench itself doesn't allow for it, but for serious spreadsheet work it's invaluable. Nevertheless, printing is quick and flawless on both dot matrix and laser.

MaxiPlan comes on two disks. A hard drive or a second disk drive is recommended; installing to the former is quick and easy. Only 1MB of RAM is needed to run the software, which functions equally well under Workbench 1.3 and 2.0. Unfortunately, MaxiPlan does not take advantage of the Workbench 2.0's 3-D appearances—another aesthetic edge that would have been nice. A function-key template is included in the package, providing quick, mouse-free access to a host of basic commands.

MaxiPlan is a good piece of software. What it lacks aesthetically it makes up functionally. The instruction manual makes learning the software relatively easy, though its lack of real-world examples to explain certain features makes having some basic spreadsheet knowledge almost necessary. If you know what you want MaxiPlan to do, it'll do it. If you're planning to learn as you go, expect to invest a fair amount of time. Whichever the case, MaxiPlan can handle all of your numerical needs.

MaxiPlan 4
The Disc Company
11440 San Vicente Blvd., Ste. 300
Los Angeles, CA 90049
(310) 207-1600
Inquiry #219



Contact 2.0

by Kim Schaffer

Often as a program develops, the users find many more uses for it than the programmer had intended. *Contact 2.0* must certainly be in this category. As you might guess from the program name, Contact 2.0 is a personal contact manager database. However, users quickly found other uses for the program as a list manager, a reference tool, and even a simple text clipboard. Contact is a serious work organizer.

Contact and its sidekick, *CalcKey*, are memory-resident pop-up programs. Once started, each displays an initial window, then closes the window and waits until the user-defined key combination calls the program to an active window. Once the pop-up window is opened, access to the Contact database is a snap. Changing databases is easy, with exporting to other applications supported in two ways.

Contact is not a calendar. However, it is a good place to keep your memory. Can't remember Sam's address? Keep it in Contact. How about the things you need to do? Contact. Can't remember some of the Amiga commands? Contact includes a database that has that information for you. For instance, how about *if*:

```
IF (NOT) (WARN) (ERROR) (FAIL) (<string>
EQ | GT | GE <string>) (VAL)

(EXISTS <filename>)

"Introduces commands to be executed

:if the condition is true, until ENDIF
statement is reached

eg if exists dh1:Contact.data

    copy dh1:Contact.data Backups:
```

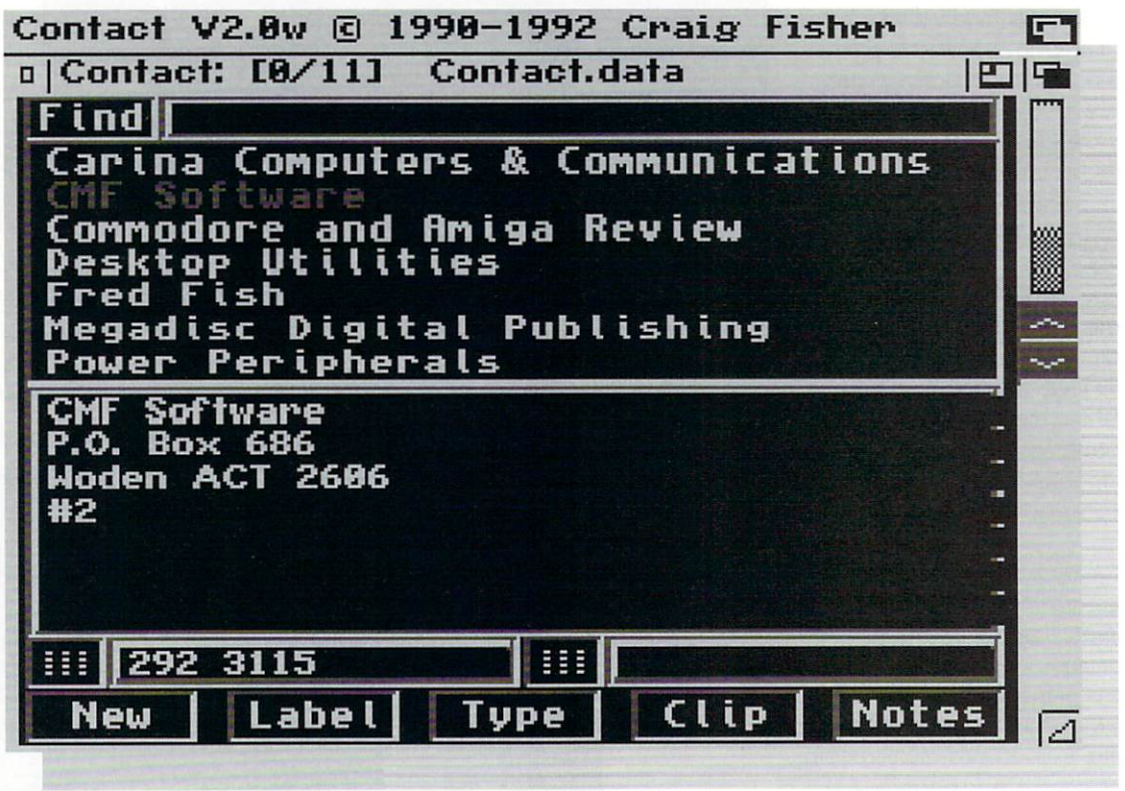
It may not tell you everything you want to know about AmigaDOS, but it's pretty good for a quick lookup. The database files are not only loaded quickly, but if you save them in the Contact folder, the filenames will even appear in the pull-down menu.

Before I give you the idea that Contact is perfect for everything, let's go over the file structure for a record in Contact. A record consists of seven lines of text, room for two phone numbers, and a note file that can be "attached" to the record. The first line of text is also the title and is what will be displayed in the scrolling window for a database.

In any of the text, there are three symbols that have special meanings. Any of the symbols can also be changed, but the defaults are @, %, !, and #. The @ and % are the default primary and secondary sort markers. Pick any word to be the word that the sort will organize by and insert the @ symbol before it. Pick a second word for the subsort and insert the % symbol before that word. Contact will not print these characters in a label so that they can be used anywhere.

The other two default symbols ! and # must be the first character of a line in order for Contact to recognize them as special characters. When the ! symbol is used at the beginning of a line, Contact knows that it is a comment line and will not print the line when printing labels. Output is supported through either the Amiga printer drivers or through Postscript.

The final symbol # is also a nonprinting line for labels and is the phone number. Two phone numbers are supported in Contact. When contact displays the record, the phone numbers are at the bottom of the display with a



button next to each number. Pressing the number will dial by tone or pulse from an internal or external modem, if you have one, it will play the tones from your speaker if you select that option. If you select the speaker option you must hold the phone up to the speaker. I have not had much luck with this option, but then usually I use an external modem.

One final field is not really part of the data at all. The note button, when pressed, looks for a text file that has the same name as the record selected. If a text file exists, then an editor opens with the selected text file. If no file exists, a new file is made with the same name as the record. If you change the name of the record the note file will not be deleted, neither will it be renamed, and Contact will make a new file the next time you select the note button.

One of the few limitations I have found is the use of the simple editor while changing a record. You cannot use the clipboard within a record. The best way to edit a record is to use the simple edit function while in Contact, or type or paste the entry into your favorite text editor, make the changes, and paste in the new record. Editing within Contact has no clipboard support, no cut or paste within the record. In addition, there are two ways to save changes in Contact. Changes are made only after the Enter key is pressed or after a period of time. Which way Contact saves is controlled by how Contact is set up. Editing with another editor will not keep any of the nonprinting characters or phone numbers with the record when you paste the text into the editor. However, when pasting into the record Contact will keep and use all special characters.

The simple interface of Contact makes it a perfect tool for an ARexx interface. ARexx is supported by 26 commands, including a GET command that loads the current record into nine variables. The variables are LINE1 through LINE7 as well as PHONE1 and PHONE2. Searches, open files, saves, and even editing notes are possible through ARexx. Several example ARexx programs are included with everything from a SuperBase-transfer utility to a holiday-checking routine.

CalcKey is a simple calculator that is packaged with Contact and supports the insertion of the answers into almost any package via the clipboard or "typing" the answer in. Other than a standard calculator, CalcKey supports binary, octal, hex, in addition to decimal arithmetic. Boolean operators, square, and square roots are supported. One memory register with addition and subtraction is available. The calculator may be operated from the keyboard with the key operator list shown in Figure 3. It is a quick calculator that will probably do 90 percent of the calculations typically needed.

Both CalcKey and Contact can be easily removed without rebooting. I have not found a screen that they cannot support, including the bridgeboard screen. They are quiet, small, and powerful programs that stay out of the way until you need them. The manual covers both programs very well in reasonable depth. It makes an excellent quick reference for those things you may not need often enough to keep memorized, but for which you need just a little nudge. Finally, Contact has keyboard shortcuts.

For the things that you need to easily find and can't remember, Contact is an excellent tool. CalcKey is a good sidekick that rounds off the reference slant of this package. If you keep running out of table space or shelf space for some of the simpler references, maybe it's time for a little personal Contact.

Contact 2.0
Desktop Utilities of North America
Dist. by Consultron
P.O. Box 3053
Manuka, ACT 2603
Australia
(011) 616-239-6658
Inquiry #220

Amiga Repair Services

**** 24 hour Turnaround ****

10 years experience fixing Commodore Equipment.* 90 day warranty on all parts replaced .* Factory Trained Service Technicians . * Low Flat Rate Prices .

A2000 $ 95.00* A500 $69.95*

The Amiga Service and Repair Video .

This video represents six years of first hand experience repairing the Amiga Computer . Covering everything from basic theory of operation to our special tricks and tips section this video is sure to save you many hours of unproductive diagnostic time . For both the user who would like to understand inner workings of this amazing computer to the experienced technician this video can save you time and money .

$39.95 + $5 S&H

Amiga Parts

Drive Assembly A500/2000/3000 $65.00 • A500 Keyboard $30.00 • Keyboard A2000/3000 $49.00 • Power supplies A2000/3000 $95.00 • (Board swaps A2000 rev 6 $225.00 • Rev 4.X Call • A3000 16 MHZ $469.00 25MHZ $479.00)

J & C Price Protection Guarantee

Only J & C gives you this price protection guarantee. If find any product we have listed here advertised for less in this or any other magazine we will meet it . If within 30 day's of your purchase you find a lower price on the same product send us a copy of the ad with a copy of your invoice and we will credit you the difference plus 10.00 toward your next purchase. some restrictions apply. Dose not apply to service.

New AMIGA 2000 w/ 2.0/ECS only $689.90

Amiga Upgrades

Amiga Dos 2.1 w/rom $84.00
DKB Megachip 2000 w/Agnus $259.00
GVP Impact Series II $169.00
GVP A530 for A500
w/ 80 mb $799.00 • w/ 213 MB $1299.00

G-Force accelators for A2000

If you see a price lower than ours on any GVP products give us a call
25 MHZ w/1mb $599.00
40 MHZ w/4mb ram $899.00
50 mhz w/4mb ram $1299.00
040 33 mhz w/4mb ram $1649.00
Add a 120 MB harddisk for $299.00
4 MB 60 NS simm's $190.00 For GVP
G-force for w/2mb ram A3000 $1299.00

Golden Gate IBM Emulators

386sx $599.00 • 486slc $989.00

Video Stuff

Video Toaster 2.0 $1949.00
DPS personal TBC III $769.00
DPS Personal V-SCOPE $729.00

Interactive Video Systems Trumpcard

Pro A2000 $169.00 • Grandslam 2000 $232.00
Pro A500 $249.00 • Grandslam A500 $289.00
Trumpcard AT $164.00

Harddisks

Conner 170 MB 369.00 • Conner 212 MB 429.00
Quantum ELS127S 127MB $325.00
Quantum LPS240S 240MB 499.00
Sysquest 88 MB 399.00• 88mb Cartridges 115.00
Sysquest 44mb cartridges 74.00

Call our toll free number for current pricing infomation.

1-800-967-1073

J & C Repair RD #2 Box 9
Rockton Pa. 15856
PA. Residents add 6% sales tax.
Prices subject to change without notice .
24 hour turnaround subject to parts availability .

Circle 165 on Reader Service card.

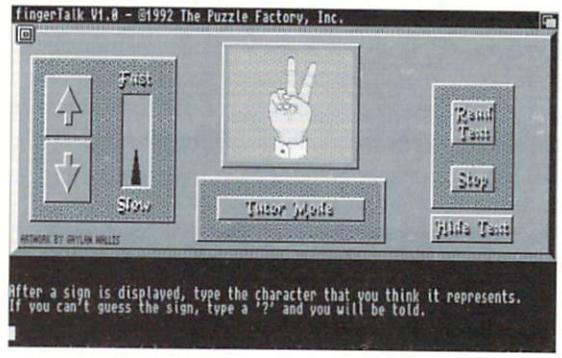
fingerTalk

fingerTalk from The Puzzle Factory presents an innovative way to learn finger spelling. fingerTalk does not teach American Sign Language, mind you. Sign language consists of hand and finger movements which represent words and phrases. fingerTalk teaches finger spelling, which is the signing of each individual letter in the alphabet.

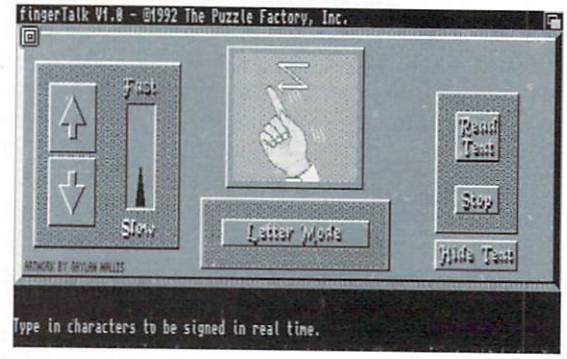
fingerTalk comes on one, non-protected floppy disk and is hard-drive installable. The program is divided into three sections: Letter Mode, Sentence Mode, and Tutor Mode. Each mode presents a different way to learn finger spelling. The program's main interface screen has a central window where the finger sign appear, a button to switch modes, arrow buttons to adjust the signing speed, and buttons which allow you to have the program sign a particular piece of text, stop the signing, and hide the text. The main screen is shared by all three modes.

The tutor mode provides an interactive method of teaching the user. A sign appears in the handsign window. You have to decide what letter it represents and type that letter on the keyboard. The program provides positive and negative feedback for the user. If you guess right, another sign appears. If you guess wrong, the sign stays in the window and you are able to guess again. The sign will stay there until you guess correctly or you ask for help. Pressing the "?" key will bring up the correct letter for the sign in the window. You must then type that letter to move on to the next sign. The fingerTalk manual includes a page of the finger signs for you to use as a guide. It is, however, fairly easy to catch on to the letters and signs without the use of the guide.

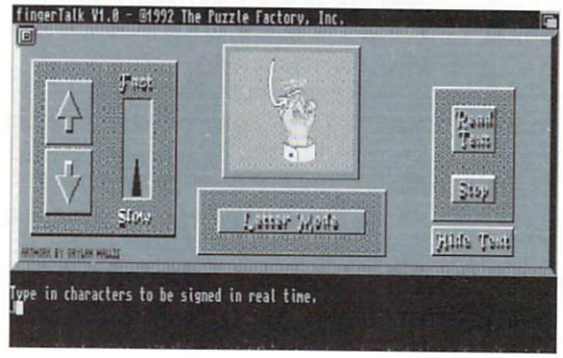
The sentence mode allows you to type in a sentence and watch as it is "read" back to you using sign in the handsign window. The characters you type are not signed until you type a return. This prevents the user from having to wait for each character to be signed before continuing with the sentence. This is a good way to practice reading hand signs. The "hide text" gadget on the main screen will hide the sentence as it is being signed.



fingerTalk makes learning the art of finger spelling fun and easy. Proper finger positions are clearly displayed in the Handsign window.



The simple interface takes away any clutter and confusion and leaves the user with a clear path tlearning.,



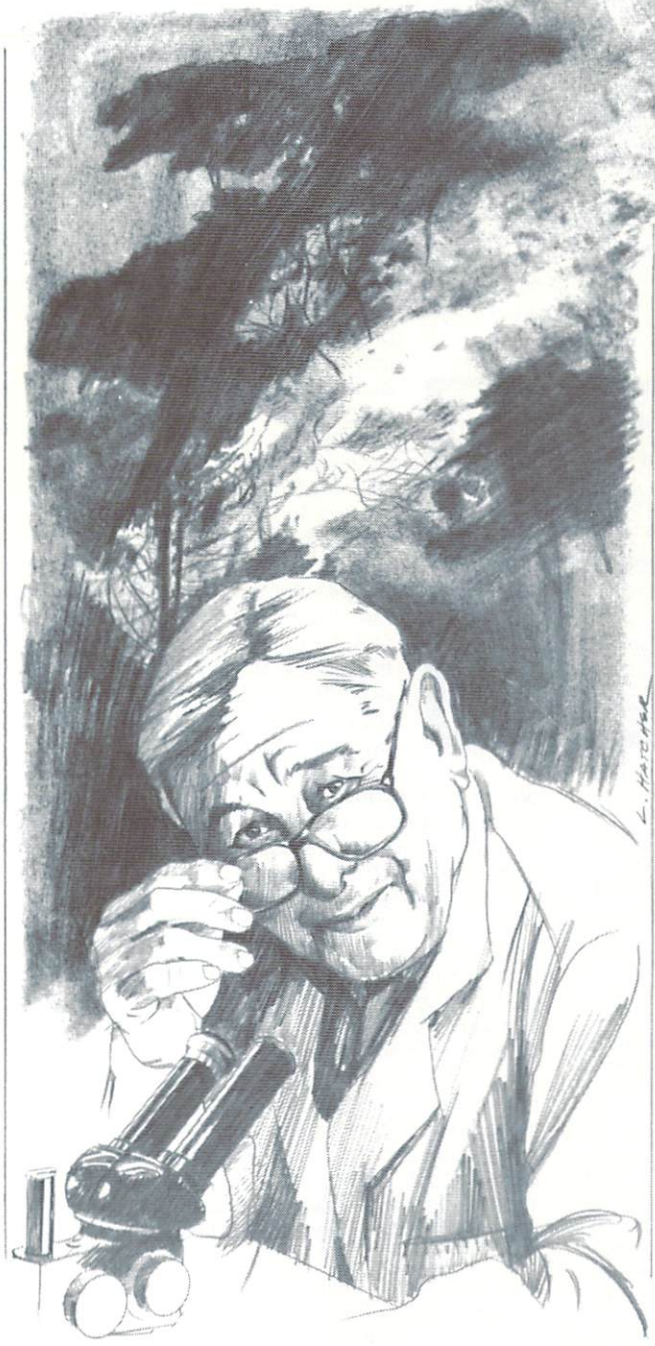
Letter Mode is designed to give immediate feedback as each letter is typed—handy for running through the alphabet or learning the signs for the letters in a particular word.

It is also possible to access a number of text files which are included with the fingerTalk program. Load a file using the load text gadget. The text will appear on the screen and will be signed as it appears. It is possible to repeat signing the file by clicking on the load text gadget again. This will bring up the file requester with the name of the last file loaded. Clicking on OK will load the file again and finger talk will repeat the read. This is sort of an awkward way to repeat reading a file. Granted it doesn't take much time for the program to reload the file, but providing a repeat button would make matters easier.

Learning finger spelling is like learning a new language. It will take patience, time, and practice before you are able to use finger spelling fluently. fingerTalk, however, is a perfect companion for anyone who is trying to learn finger spelling. It will take practice to get all the hand positions correct. It is a good idea to practice with someone while using the program and to sign the characters as they appear on the screen. This will help you associate the signs you see with the hand motions you must make. The fingerTalk manual provides some helpful information on learning finger spelling. It gives tips on reading and practicing hand positions as well as signing numbers, acronyms, and fractions. It also has a section of finger spelling games designed to help with finger spelling practice. The manual also gives useful instruction on how to use the program and get the most out of it. fingerTalk is an excellent way to learn how to finger spell. Using the Amiga as a teacher makes it interesting and easy.

fingerTalk
The Puzzle Factory, Inc.
P.O. Box 986
Veneta, OR 97487
(503) 935-3709
Inquiry #237

IT'S TIME TO STOP THE BURNING.



96,000 acres of irreplaceable rain forest are burned every day.

The rain forest is the world's great pharmaceutical storehouse. It provides sources for a quarter of today's drugs and medicines and seventy percent of the plants found to have anti-cancer properties.

This senseless destruction must stop. NOW!

The National Arbor Day Foundation, the world's largest tree-planting environmental organization, has launched Rain Forest Rescue. By joining with the Foundation you will help establish natural rain forest barriers to stop further burning and support on-site conservation plans to protect threatened forests.



Each and every second, a rain forest the size of a football field goes up in smoke. You'd better call now.

Rain Forest Rescue™

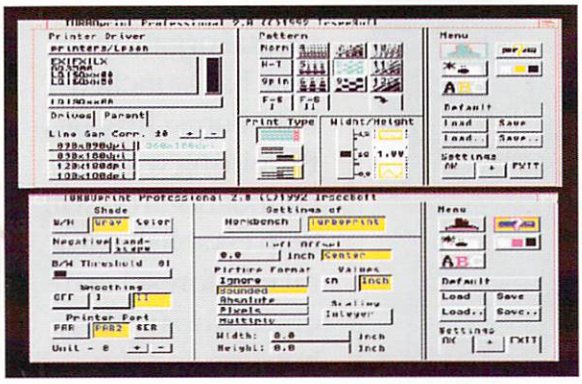
The National Arbor Day Foundation™

Call Rain Forest Rescue.
1-800-255-5500

TurboPrint Professional

by R. Shamms Mortier

The first time I saw *TurboPrint* was a few years back. At that time, it was in its 1.0 stage, and was one of two programs, the other being a now defunct program called *FinePrint*, that allowed me to get truly professional results from my 9-pin dot-matrix printer, an Epson FX-100. TurboPrint was unique because it addressed the printer with a selection of interference patterns—diagonal lines and dots—that gave the visual impression that the output was somehow much finer than a dot-matrix would allow. I reviewed TurboPrint at the time for *Computer Shopper* when it had an actual Amiga section, and my observations were glowingly positive. After all, very few programs at that time elevated the status of a dot-matrix printer to a "professional output device," and it's only recently that Amiga desktop publishing software and other utilities like ASDG's *TruePrint 24* have addressed this possibility.



The TurboPrint Screens

The purpose of TurboPrint is to reside in your system's memory so that once it's activated all printing from any software is routed through it. From my experience, this works better with paint programs than with DTP software. DTP software like *PageStream* and *ProPage* usually has its own prioritized printer drivers, and trouble and confusion result when trying to mix the printing conditions. TurboPrint Professional also has the ability to address laser printers, not so much to enhance the observed resolution of the output as much as to add variable screen printing to their capacities. Resolution output, however, is definitely upgraded when printing to dot-matrix printers. Five separate TurboPrint screens have parameters that must be set for it to do what it was designed to do.

The Printer screen is the first one you will encounter. The first thing to do here is to find your printer in the TurboPrint list. This list is definitely limited as compared to the latest WorkBench choices. But not to worry. You can also select to print to a WorkBench Preferences printer if yours is not on the list, though the speed of TurboPrint in doing so is decreased. You're in luck, however, if you have one of the following listed printers: Brother, Canon, Citizen, Epson, facit, HewLett Packard, NEC, Okidata, Pansonic, Seikosha, Siemans, or Star. All include a wide variety of possibilities, including lasers and color printers. To prevent the printing of horizontal striping on dot matrixes, you may need to set a "line gap correction" number. Dot matrix printers can also take advantage of normal printing, half-line mode, which uses only half of the available pins on each pass, and a lower pin count setting for 9 pin printers. There is also a setting that allows you to adjust the pixel/print height/width ratio. By far the most important selection on this screen is the choice of output patterns. Different printers make use of different options, and the manual contains a very helpful list and graphic examples to help you along. The patterns can even be rotated if desired, creating alternate rosette patterning on color printers.

The Preferences screen is next. Remember that TurboPrint supersedes your WorkBench Preferences choices unless you either toggle it off or never start it in the first place. TurboPrint's Preferences screen looks a lot like the WorkBench Preferences, except that it's a lot more compact. You can find all the normal choices and boundaries here, from shade and color settings to picture format and scaling values. Selecting the option "Par2" allows the use of TurboPrint's printer driver options and runs them at a faster speed than WorkBench drivers.

Additional functions can be addressed from the Settings menu. Firstly, on the left, is a graphed section that represents how large a picture can be printed. With this toggled on, you can output an 8x8 print of your image. With 8 1/2 x 11 paper, this means an image over 5 feet by 6 feet in size, with antialiased smoothing included. Any number of copies can be set, as well as flipping the image and targeting the printing offset. There is also a screen grabber function, but I couldn't get it to work on my A-4000; it kept trying to save screen in 640x200 resolution with 32 colors, something not allowed in my *DPaint IV* version, but promised to be addressed in the next DPaint IV upgrade.

The fourth screen is called "color conversion" in the manual, but I refer to it as the Palette Screen. There are some very fancy items here, ones that allow you to print to a color printer with all the necessary corrections professionals require. This includes color correction on several levels for matrix, inkjet, and thermal printers, and a very intricate logarithmic gamma correction section to address printer brightness range settings. The manual shows samples of the gamma corrections at different levels to give you some idea of what can be produced. Color correction may also be necessary when you target a grayscale printout, so that some of the denser colors are muted. The TurboPrint manual has pages devoted to the correct use of color corrective adjustments, whether you are using a color or b & w printer.

The last screen to mention is the "Text Adjustment" option, the newest addition to the TurboPrint arsenal. It contains both paper size and text selection/color settings. It also allows the user to address the internal printer fonts, so that text files can be printed in a high quality typeface, even ASCII files direct from storage. Two charts walk you through standard number settings for dot-matrix and laserjet printer internal font settings.

Conclusion

I had no problem installing TurboPrint on my A-4000. I found the screen grab utility, however, to be quite unfriendly as mentioned above. Installing it on my A-2500 proved to be much more workable, except for the fact that I could not get it to address my Laserjet (HP III). I ran it from an A-2000 at work, an unaccelerated Amiga that still uses WorkBench 1.3, and that is attached to an Epson FX-100 dot matrix. As with the first issue of the software, this produced unbelievable results for a dot-matrix, even with an old ribbon. I still, then, have very high regard for this product, but it is somewhat qualified. By not addressing my laserjet, and by having its own difficulty running flawlessly under WB 2.1 or 3.0, it needs some serious tweaking. On the other hand, it has attributes that I wish we had available in WorkBench Preferences.

The result of my testing and deliberations is that while I cannot recommend TurboPrint to every Amiga user, I can suggest that every dot-matrix user give it serious thought.

TURBO-Print-Professional
INOVAtronics
8499 Greenville Ave., Ste. 209B
Dallas, TX 75231
(214) 340-4991
Inquiry #238

ONLY THE BEST!

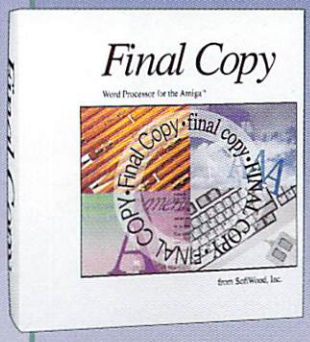
Writing Software By SoftWood.

Final Copy

Final Copy produces the highest quality output of any Amiga word processor. It comes with 13 outline fonts and creates documents that can be printed on any 1.3 or 2.0 Workbench supported graphic printer or PostScript® printer.

Includes a 114,000 word speller, 470,000 synonym thesaurus with definitions, automatic text flow around graphics, automatic hyphenation, ARexx port, headers, footers, and multiple columns. Say goodbye to jagged edged output forever.

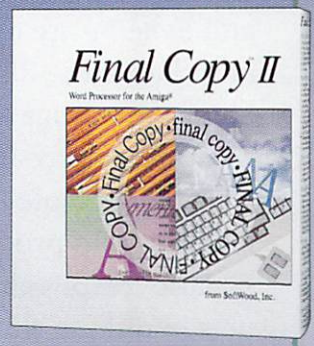
$39.95



Final Copy II

Final Copy II contains everything in the original Final Copy plus: structured drawing tools, style sheets, master pages, color text, 1.4 million response thesaurus, 144,000 word speller, math, paragraph sorting, mail-merge, left-right pages, text obliquing, new user-interface, improved memory management, many new ARexx commands, vertical ruler option, new page guides, and more. Use the structured drawing tools to create boxes, ovals, lines, arrows, circles, and squares in your document.

$89.95



SoftFaces

SoftFaces from SoftWood utilize only the highest quality fonts, designed by world-famous type designers.

Each volume contains 25 typefaces. These carefully chosen typefaces are designed exclusively for use with Final Copy. Widely recognized and useful, SoftFaces' professional quality typefaces give your documents the creative flair they deserve.

These typefaces are outline fonts that can be sized from 4 points (1/28 inch) to over 300 points (over 4 inches). These fonts have no jaggies and will print using the full capabilities of your printer.

$59.95



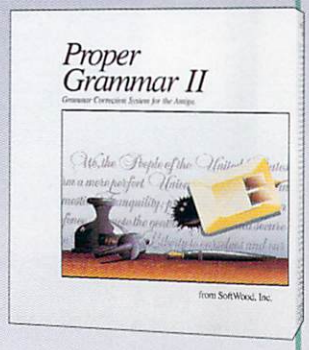
Proper Grammar II

Use Proper Grammar to detect and correct 95% of your writing errors. It is the best companion to your favorite word processor.

Proper Grammmar can read, correct, and save documents created in FinalCopy, PenPal, ProWrite™, QuickWrite™, Excellence!™, Scribble!™, KindWords™, TransWrite™, and TextCraft Plus™. Don't be embarassed by bad writing or silly mistakes again. Detect and correct grammar errors in all of your writing.

Hard disk required.

$54.95



- $5.00 2nd day shipping to most cities in continental U.S.
- 30 day exchange - no questions asked

SmartSoft
800-824-6785

VISA MasterCard

- Order hours M-F 10 - 6:30 EST 7 - 3:30 PST
- Same day shipping on orders received by 5:00 EST or 2:00 PST

SmartSoft, Inc., P.O. Box 51840 • Phoenix, Arizona 85076

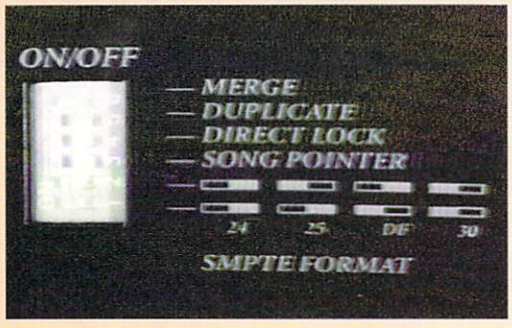
Circle 115 on Reader Service card.

Triple Play Plus & SyncPro

—MIDI and SMPT Hardware from Blue Ribbon

by Rick Manasa

We're used to seeing innovative music programs from Blue Ribbon SoundWorks, but we're not used to seeing hardware. *Triple Play Plus* and *SyncPro* are the first such products from Blue Ribbon. They strengthen any claim Blue Ribbon cares to make to being the premier development house for Amiga MIDI music products. For years, Dr. T's was the only complete source for MIDI products for the Amiga. Now, with the introduction of Triple Play Plus and SyncPro, Blue Ribbon has beefed up an already solid product line. These professional-level hardware interfaces expand the possibilities and productivity of your other Blue Ribbon products in unique ways without compromising the usefulness of these boxes for those who use other companies' software.





Triple Play Plus & SyncPro are the latest additions to the powerful line of Amiga MIDI packages from The Blue Ribbon Soundworks

Triple Play Plus is a one In, three Out, MIDI interface with some special features for users of *Bars & Pipes* and *Bars & Pipes Professional*. With *SuperJAM!* or any other Amiga MIDI program, it functions as a standard MIDI interface, with one In, one Thru, and three separate Outs. You can select which Out is active by running the included Triple Play Plus program and designating the active output. This turns Triple Play Plus into a kind of poor man's MIDI switcher. It lets you hook up three separate devices at the same time to your Amiga without provoking the dreaded MIDI delay, which can occur when you link MIDI devices in a serial fashion through the MIDI Thru ports. It also means you won't have to be swapping cables just to get at your different sound modules.

Things get very interesting if you use B&P or B&P Pro. After installing the appropriate tools, Triple Play Plus lets you address 48 separate MIDI channels at the same time. That's a lot of music power. This moves the Blue Ribbon music environment one step closer to MIDI nirvana. If you tend to clog the MIDI data stream with your polyphonic 64th-note riffs blazing away, you can assign one-third of your hot licks to Output 1, one-third to Output 2, and one-third to Output 3. This is similar to syncing three separate sequencers and running them all at the same time. Awesome, dude.

Installing the hardware is straightforward. With your Amiga powered down, plug the Triple Play Plus into the serial port. Plug in your MIDI cables and you're ready to go. If you use one of the

supported software packages, you can install special MIDI Out tools that will let you direct portions of the data stream to one of the three available outputs. These Triple Play Tools are labeled 1, 2, and 3, and correspond to the MIDI out ports on the interface. Once you've connected the interface and installed the tools, you can address 16 MIDI channels through three separate ports (16 x 3 = 48 virtual MIDI channels).

You might not be able to think of a lot of uses for 48 MIDI channels, but there are plenty of people who absolutely require it. In fact, many professionals have rejected the Amiga as a serious MIDI platform because of the 16-channel limit. Here are some real-world examples of the usefulness of three simultaneous outputs. Let's say you have two or more of the relatively low-cost multi-timbral modules. Many of these modules are capable of generating 32 separate voices on any combination of the 16 MIDI channels. With Triple Play Plus you could assign completely different voices to each of your modules, and route them to any of 48 available outputs. If you needed to have more than 16 parts playing at once otherwise, you'd have to embed program changes in your sequence or manually reset sounds at the synth on the fly or resort to some equally inelegant solution. While you could record 48 separate parts with B&P Pro without Triple Play Plus, you couldn't play these parts back in real-time without it. Forty-eight separate channels could be helpful in the world of multi-track recording, where two 24-track machines are commonly locked together. A one-to-one, channel-to-track relationship can help simplify what frequently develops into a nightmare of twisted cables and hastily scribbled track sheets and sticky notes. There are also MIDI modules that have nothing to do with sound generation that could take advantage of Triple Play Plus. Many lighting control modules will respond to MIDI commands, as will most signal processing and effects boxes. You could assign output 1 to your music gear, output 2 to your lighting board, and output 3 to your signal processing rack. Triple Play Plus is one of those products that will generate uses that you hadn't thought of before.

With all the vision being exercised in the conception and design of this box, it's a puzzle how something as obvious as a serial port pass-thru was overlooked. Blue Ribbon appears to be saying that this box is for musicians only; multitaskers need not apply. You'll be behind your computer, yanking cable in the dark, if you use your serial port for other purposes. Anyone working with a modem or a laser printer hooked up to their serial port will have to invest in a flashlight or a switchbox.

A call to Blue Ribbon explained the design rationale. They found that users they polled said they didn't really need the pass-thru, especially if it would add to the cost of the box. The interface would not only be more expensive, but it would be larger as well. With many people going for internal modems and parallel port laser printers these days, the serial port appears to be becoming the MIDI and video port, in effect if not in name. With switch boxes a reasonably-priced alternative, Blue Ribbon's decision makes good sense for many of its customers.

You might not think of yourself as a candidate for Triple Play Plus, but beware. One of Murphy's Laws states that stuff will expand to fill available space. If you have 48 channels available, you will find a way to use them, and probably cry for more somewhere down the line. As a matter of fact, the Thru port on the Triple Play Plus could be converted into another Out port without too much trouble. Can you say 64 channels, boys and girls?

SyncPro

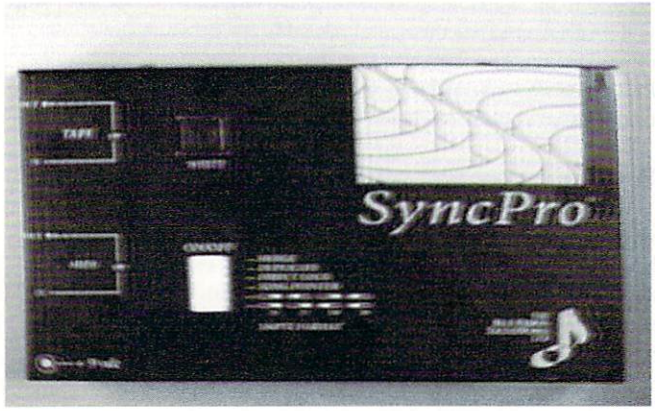
SyncPro is a universal synchronization box that will read and write all formats of SMPTE code, MIDI Time Code, and Song Position Pointer. In addition, SyncPro will jam sync to any previously recorded time code stripe. Combined with your MIDI sequencer and a multi-track or video recorder, SyncPro allows you to lock your MIDI compositions to previously recorded material, whether that be more MIDI tracks, a video tape or film or acoustic tracks recorded to multi-track. This opens the way for mega-multitrack recording, quite suitable for major recording artist projects or Hollywood motion picture soundtracks. It will also help you work in a more professional way with local cable projects, letting you synchronize sound effects and orchestra hits to a video hit list.

The SyncPro box is about the size of a paperback book and very sturdily constructed. There is a set of audio jacks for reading and writing SMPTE code and a pair of MIDI jacks for sending and receiving timing data to and from your MIDI keyboard or sequencer. There are LEDs associated with each set of jacks that light up when information is coming through the ports. There are also six sets of DIP switches, which switch on and off a variety of functions. SyncPro will allow you to Merge data coming in the MIDI port with material already sequenced. This will let you insert music and sound effects on the fly from your MIDI keyboard. The Duplicate function will regenerate code based on the code being read at the audio In jack. This is essential for maintaining code integrity when swapping tapes back and forth, jam syncing, and the process of recovering lost timing data. SyncPro supports the Mark Of The Unicorn Direct Lock code, in addition to Song Position Pointer and MIDI Time Code, so virtually any sequencer package is supported. All forms of SMPTE code are supported as well, and are selected from the front panel DIP switches. Finally, there is a button for manually starting the writing of code.

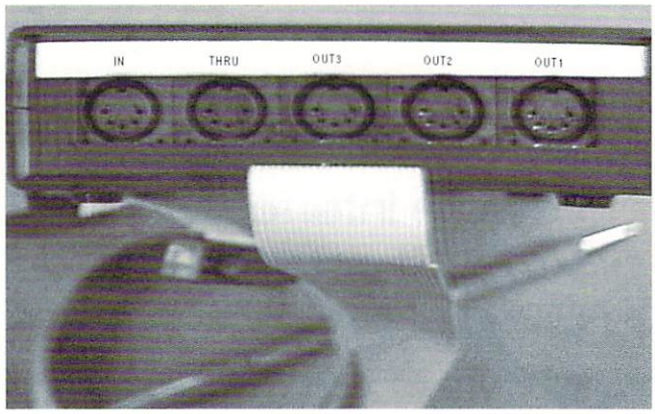
We had some trouble with the initial package sent by Blue Ribbon, but their customer support team dug right in and helped us track down the problem. Be sure you have the 2.2 version of the

With the introduction of Triple Play Plus and SyncPro, Blue Ribbon has beefed up an already solid product line. These professional-level hardware interfaces expand the possibilities and productivity of your other Blue Ribbon products.

MIDI In tool for B&P Pro, or SyncPro won't be able to drive the sequencer. Some of the early versions of the current release (1.0e) came with older implementations of the tool. Just click twice on the tool, then hold down your right mouse button. The title bar will display which revision of the tool you're working with.



Above: SyncPro. Below: Triple Play Plus box.



Once we got it up and running, SyncPro performed without a hitch, locking to code very quickly and staying put throughout a long day of testing. SyncPro defaults to being activated and in Run Lock mode. When it has been loaded as an Accessory, SyncPro will jump into action as soon as it detects code in the stream. You won't have to click on the icon each time you boot Bars & Pipes to get it started.

Dropouts & Glitches

SyncPro is a good little sync box, with only a few puzzles and drawbacks. The SyncPro system really isn't complete without a MIDI interface. While many musicians will have an interface, there are many videographers with a basic music setup that they use for laying drum machine beds and simple drones under their videos. These people will not necessarily have a sequencer/interface package and will have to invest in a MIDI interface if they want to take full advantage of SyncPro's capabilities. Score one for Dr. T's *Phantom*, which includes a MIDI interface as well as a serial port pass-thru. SyncPro is powered by a 9V wall wart, a device which is slowly multiplying in my basement. I'd love to see another solution to the power problem. The cables are thin, the jacks are easily bent and they always take up two spaces in a strip. Two points for the Phantom, which snatches its power from the serial port.

The rest of the game, however, belongs to SyncPro. The Phantom lists at $350 compared to $199 for SyncPro. While the Phantom does include a MIDI interface, you can certainly find a generic interface for less than the $150 difference. For another $30 retail, you could have the Triple Play Plus, which would give you three-times the addressing power of the Phantom. With normal discounts available, the SyncPro/Triple Play Plus combo should compete quite effectively with the Phantom for your synchronizing and MIDI interface dollars. The Phantom will only read and write SMPTE and, since it plugs into the Amiga serial port, can be used only on the Amiga. SyncPro, on the other hand, will also converse in Song Position Pointer and Mark of the Unicorn's Direct Lock format, and it will hook up to any MIDI interface for the Amiga, Mac, Atari or IBM, making it the only timing device you would need across any platform. SyncPro will merge data coming from your keyboard with previously recorded material and will regenerate SMPTE and Song Position Pointer code; the Phantom won't. Those currently using the Phantom who are interested in switching to SyncPro will have to pop for the MIDI interface as well. We tried to use the Phantom as a stand-alone MIDI interface with SyncPro serving as the timing source and director without success.

Comments and Suggestions

Frankly, there isn't much I would change in either of these boxes. Maybe make the physical dimensions smaller, or create a combination box with all the features. Add a serial pass-thru to the Triple Play Plus for those with stand-alone laser printers or modems. Replace the DIP switches on SyncPro with something larger, or put those options under software control. None of these suggestions, however, is a negative comment on the performance or usefulness of Triple Play Plus or SyncPro as they stand. Both perform their functions solidly and provide all the bells and whistles you're likely to need. If you require more than 16 MIDI channels in your work, or if you have to synchronize your MIDI masterpieces to audio or video, you won't find a better combo solution than Triple Play Plus and SyncPro.

Special thanks to Jon Tindall of MetroGrafx, a computer animation and graphics house in Lake Orion, MI, for providing his facility, comments, and expertise in testing SyncPro.

•AC•

SyncPro Universal Synchronization Box
Inquiry #228
Triple Play Plus
Inquiry #229
Blue Ribbon SoundWorks
Venture Center
1605 Chantilly Drive NE Suite 200
Atlanta GA 30324
(404) 315-0212
(404) 315-0213 fax

Please Write to:
Rick Manasa
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140

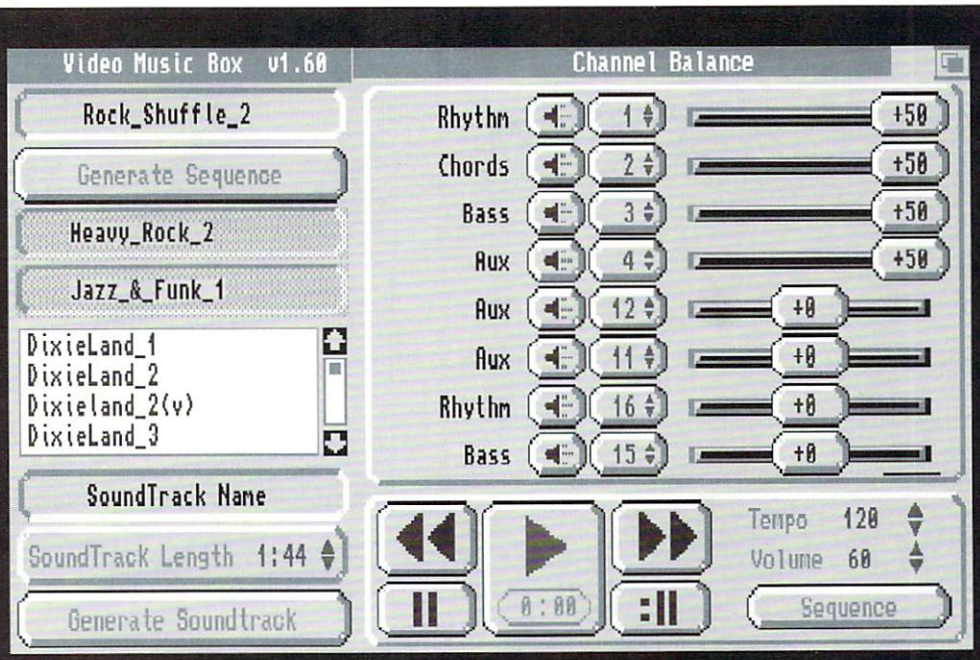
DIGITAL EXPRESSION'S VIDEO MUSIC BOX version 1.6

by R. Shamms Mortier

The Amiga has some excellent music programs, though this is often forgotten because of the rush to cover the graphics and animation scene at every turn. There are composition, jukebox, score printing packages, and more. Most of these require at least a summary knowledge of MIDI or music theory, or both, in order to create a semblance of sound that might suffice as a score for a video. As a musician with over 40 years of experience, I have little trouble with using any of the software for creating songs and sound effects, but I fully realize that many Amiga video enthusiasts may not be able to draw upon the same experience. For those individuals who need some software that will help them along with video sound and even for experienced users who still enjoy the challenge of new software alternatives, *Video Music Box* may be just the ticket.

The screens and tools

The object of this software is to automatically generate musical "feels" for video soundtracks. Because of this, the software itself lists an almost infinite amount of variability from the included library of parameters. Two separate categories of sound are chosen and combined for the initial pieces: "Progressions" and "Styles." A Progression is a set linear march of chords or notes played in unison, and a Style is an identifiable musical category, like "Blues," "Jazz," "Latin," etc. The library of Progressions lists 76 different ones, while there are seven Styles represented. Of course, you can also create and save your own too. With the library listings alone, over 500 combinations are possible. Progression plus Style equals Sequence. Sequences can then be edited, manipulated, combined, and altered in several different ways to create Soundtracks. The user can "play" using the Amiga's internal sounds (8svx), or he can target connected MIDI instruments for more variable and professional results.



Though the individual notes can be edited to your desire, I would suggest that you develop your parts, or even entire scores, elsewhere, and then use this software to tweak certain parts. This is so because Video Music Box makes no claims to being a full music composer, and it isn't. Any Amiga software that creates either SMUS or MIDI music files can fill the gap, and that includes most packages. For those folks, however, that have no such expanded needs, Video Music Box has all the stuff on-board to create basic but alluring soundtracks.

The main screen (Figure 1) can actually suffice as a basic track creator without your ever

having to go anywhere else. Libraries of Progressions and Styles can be accessed here, internal instruments loaded in, and Sequences created on the spot. On the lower right you can see the basic tape recorder-like controls for playback, rewind, forward, pause, and looping. Tempo and Volume gadgets are in place, and can act on a playback in real time. There is also a toggle that switches between the playback of a Sequence or a full multi-Sequenced Soundtrack.

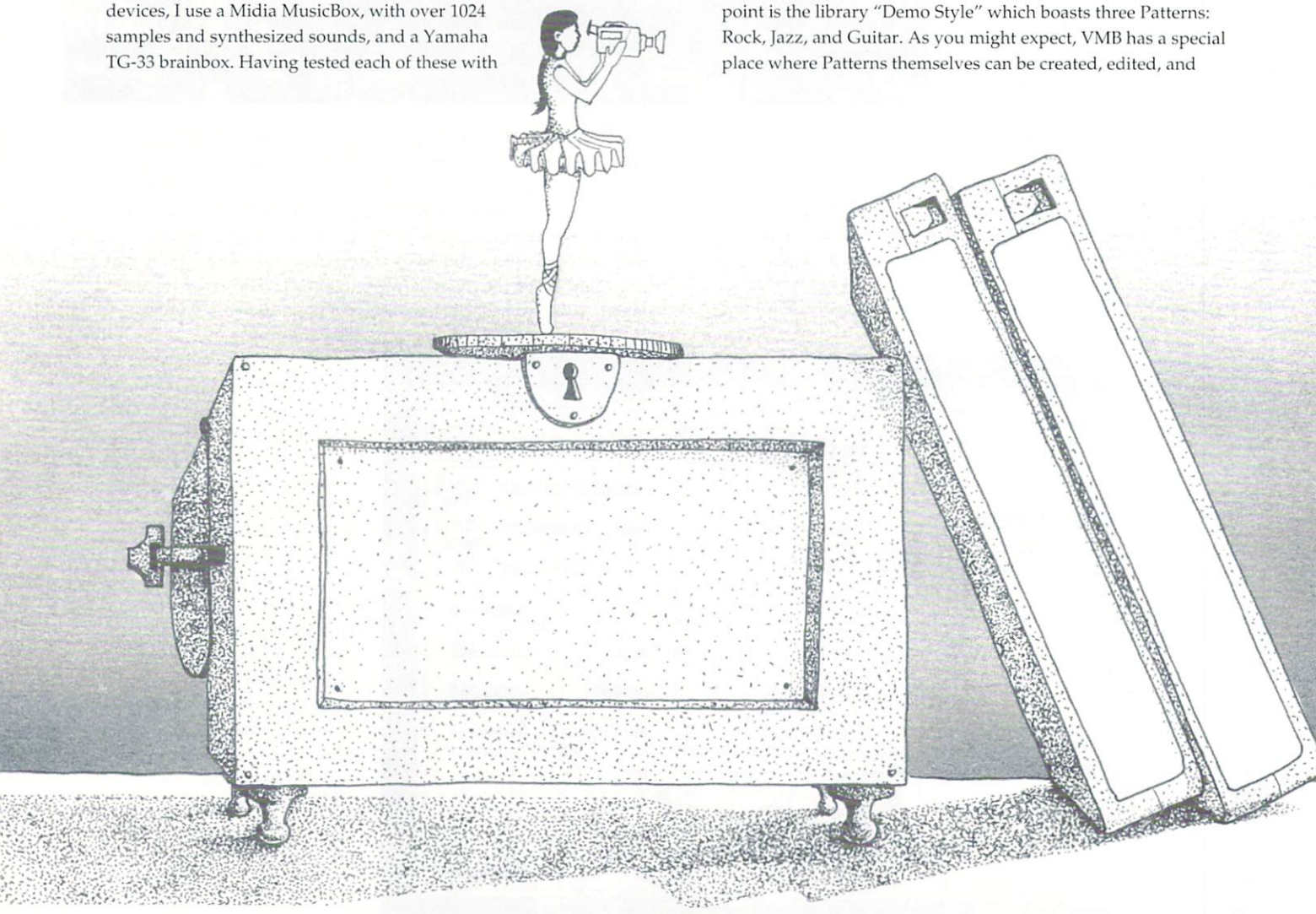
Advanced users will want to tinker more, and there is sufficient opportunity here to do so to your digital heart's content. For one, I would suggest that serious users that want to utilize the Amiga's internal voices should retrieve additional high-quality 8svx samples; DMusic has some nice samples, and other libraries abound. Just store your favorite and needed sampled instruments in the instruments drawer. The first thing I added were some quality piano and vibe samples.

MIDI "instruments" are really samples of sounds or waveform-generated patterns that arrive packed in electronic brain boxes. Sometimes they have keyboards attached and sometimes not. MIDI sounds can be triggered from external sources, sometimes from "dumb" keyboards or other devices, and sometimes from computer terminals. Video Music Box is 50% MIDI-compatible. MIDI sounds are always thicker and richer than Amiga internal voices. What I mean is that MIDI always allows for 16 separate sounds to be triggered at the same time (16 tracks), while VMB allows you to target eight sounds on any MIDI device. As MIDI devices, I use a Midia MusicBox, with over 1024 samples and synthesized sounds, and a Yamaha TG-33 brainbox. Having tested each of these with VMB, I can attest to the software's MIDI value. It might be nice if a future version of VMB allowed the concurrent triggering of both Amiga internal voices and MIDI channels. That way, you could put drum sounds on the internal channels and use MIDI for other instruments.

Some years ago I developed a soundtrack for a short Hollywood documentary using Activision's *Music Studio* software. I really appreciated the ability to draw patterns on the screen almost at random and translate them into sounded notes. No other software ever satisfied me in that regard until VMB. VMB has a "draw" utility on the Edit Notes screen that does just that. I can even set a definable scale that I might want to stick to on the graphic keyboard, and randomize my notation within a structured environment. Pretty neat!

Few things have been left to chance in this software. The trained musician can dig in and alter the notes in any chord or scale with on-screen piano keyboard graphics. I added three scale patterns not contained in the library, and saved them in about five minutes. For a few of the stored chord progressions, I "opened up" the chord voicings to reflect my own playing/composing style. VMB also allows the experimental composer some nice tools, among which are Retrograding, Interval Expansion and Compression, Cyclic Permutation, Remapping, and Inversions.

In VMB, a "Pattern" is one variation that a style may possess. Therefore, any one Style can include several patterns. A case in point is the library "Demo Style" which boasts three Patterns: Rock, Jazz, and Guitar. As you might expect, VMB has a special place where Patterns themselves can be created, edited, and



saved to specific Style environments. Patterns are usually two to four measure sections that are crafted as cousins of each other in a Style.

Conclusions

Some things I would like to see in future upgrades are as follows:

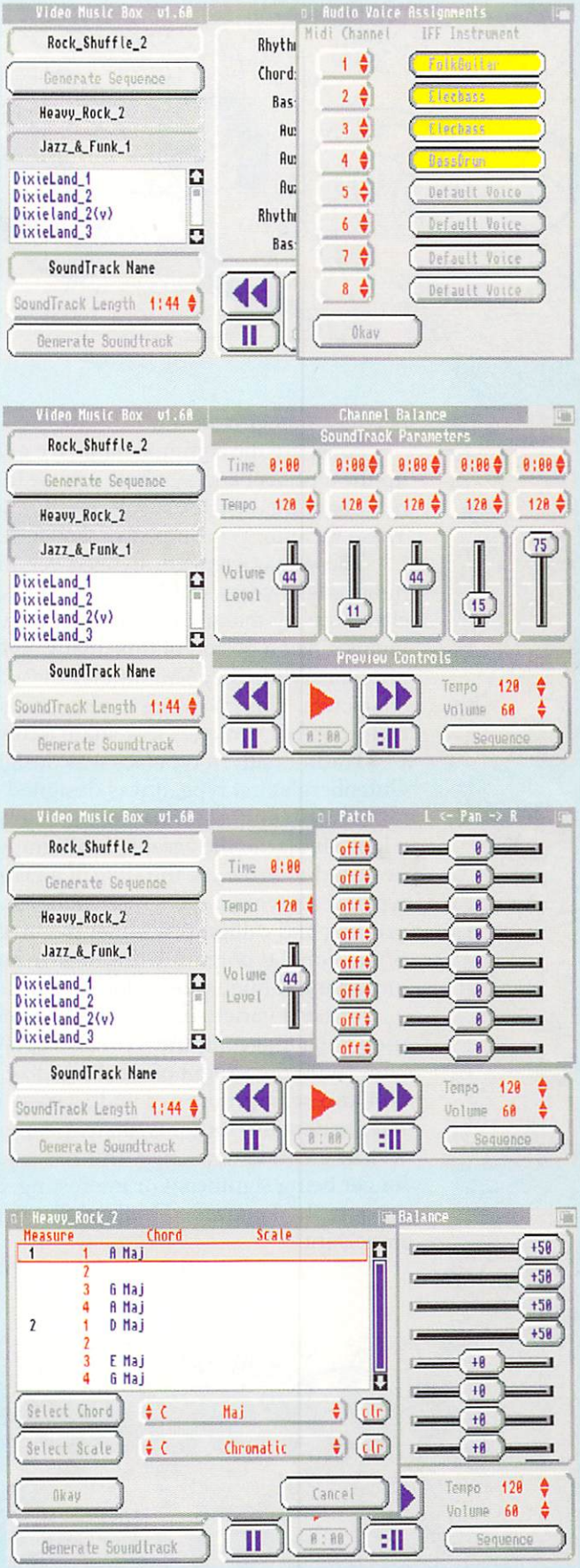
1. A more standard way of representing the musical notation on an alternate "Edit Note Data" screen with lyrical options, in addition to the present graphical interface. This would make it easier for folks like me to utilize their ability to edit using standard notation.
2. Printout capability in standard notation. This would greatly help when tying this software to client interactions, especially when using the printed score with a storyboarded graphical sequence.
3. The ability to move all screen sections around. Right now, this can be done only with some screens. Also multitasking should allow for the use of the front/back requester as well as the Amiga-M key combination. This should be added as soon as possible.
4. Insert modes on the "tapedeck."
5. Volume and tempo sliders to replace the arrow up/down gadgets. This would make interactive control in real time achievable.
6. Utilization of all 16 MIDI channels, not just eight. True, eight channels is usually enough for major instruments in a song, but many times it's nice to have a separate channel, or channels, for textural effects and/or sound effects.
7. More disks of alternate Progressions and Styles, maybe drawn from a user base and offered for moderate prices in a Digital Expressions newsletter. This package could use a nice informative newsletter for serious users anyway.

The documentation is clearly written with adequate tutorials, and comes in a convenient spiral binder that opens flat on a work desk. None of my comments and wishes as listed above should dissuade you from seriously considering the purchase of this software. When Electronic Arts releases the long overdue upgrade to Deluxe Music this spring, and the VMB software should find its way as a strong companion to the DMusic upgrade. It fills a need in the Amiga and video market for a tool that can be as simple to use or as professionally dedicated as the user's creative energy and experience behind it.

•AC•

Video Music Box
Digital Expressions Research
W6400 Firelane 8
Menasha, WI 54952
(414) 733-6863
Inquiry #236

Please Write to:
R. Shamms Mortier
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140



Various interface screens from Video Music Box. From top to bottom: Vocal assignments, soundtrack parameters, MIDI parameters, and the Edit Progression screen.

Fonts

A brief origin of fonts

Fonts are the common name we give for collections of characters that make up the alphabet and symbols we use to write our language. For the most part, readers of this article are interested in what is known as the Roman characters. These include A through Z as well as accented and some special characters.

These characters are stylized versions of characters that have evolved for hundreds of years. Publishing itself had a hand in the standardization of these characters by making the same set of symbols widely available in printed documents. Over a period of time many stylistic variations of these characters became popular. While they had different visual attributes, they were all clearly the same characters. This gives rise to our concept of different typefaces. A typeface is a collection of characters that share a common set of visual attributes.

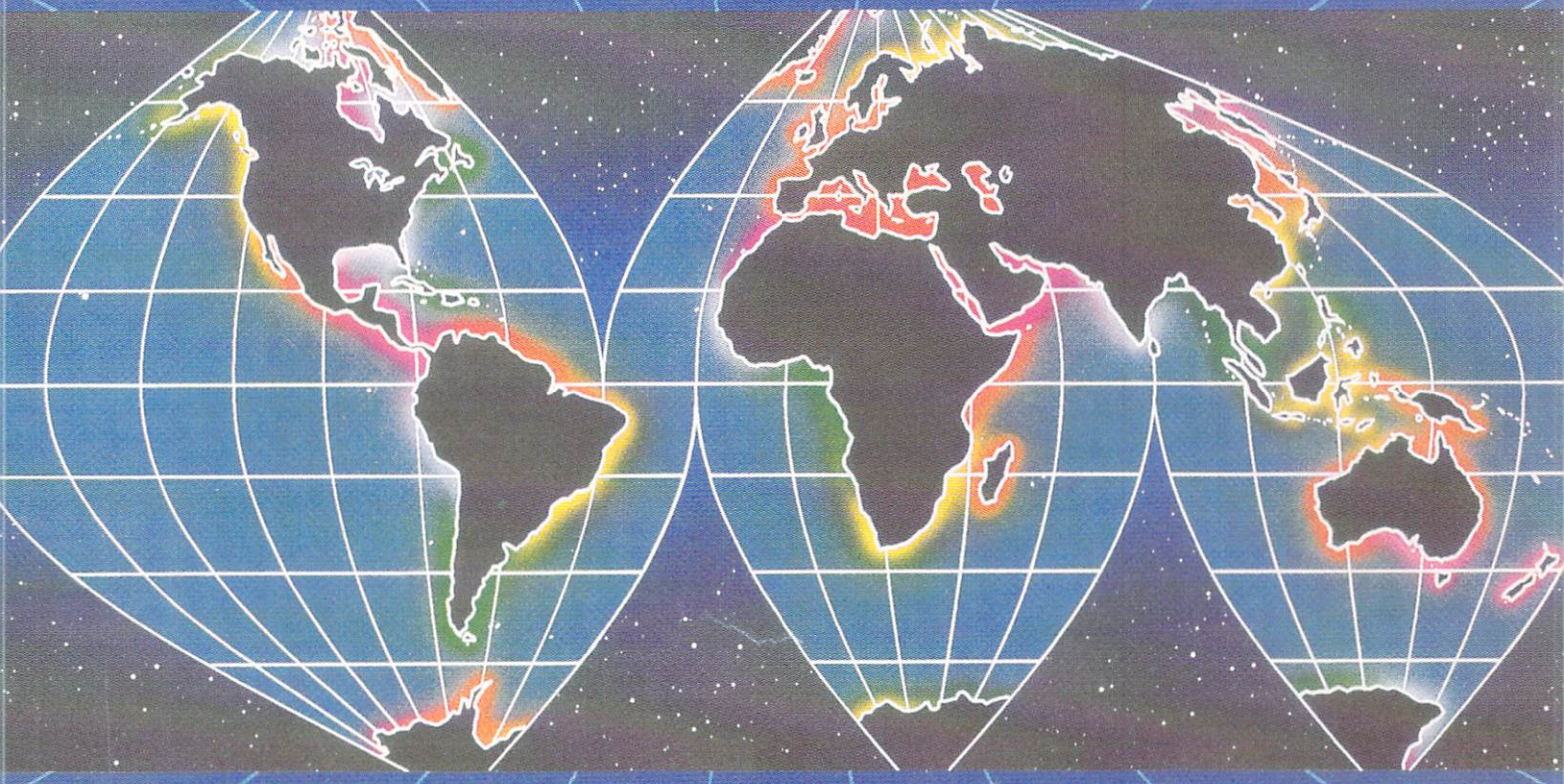
Traditionally, a typeface was designed to meet a certain need. In the case of Gutenberg's first type, it was designed to fit the maximum number of lines of text in a given space while maintaining crisp legibility. The type also had to have a look similar to the accepted calligraphy of the day. Other typefaces were designed to resemble the style of a given region or period. While the needs for typefaces have changed, many modern typefaces still have their origin in old printing and calligraphy either by direct lineage or by historical research. In professional typography this lineage and name of a font can often be very important, though mostly for identification and academic reasons.

Today a variety of fonts has become commonplace on computer displays. It used to be that computers could display only dull, chunky uppercase letters. Now, with the advent of machines like the Amiga, computers display uppercase and lowercase letters in a wide variety of sizes, styles, and colors. Due to the intense demand for fonts, many people are making copies of popular designs as well as creating new ones. This has lead to the names and origins of fonts no longer being significant or interesting. So while the history and perhaps soul of typography have faded in the realm of computers, the mechanics are still just as important. →

Desktop Publishing Fundamentals

by Dan Weiss

Writers!

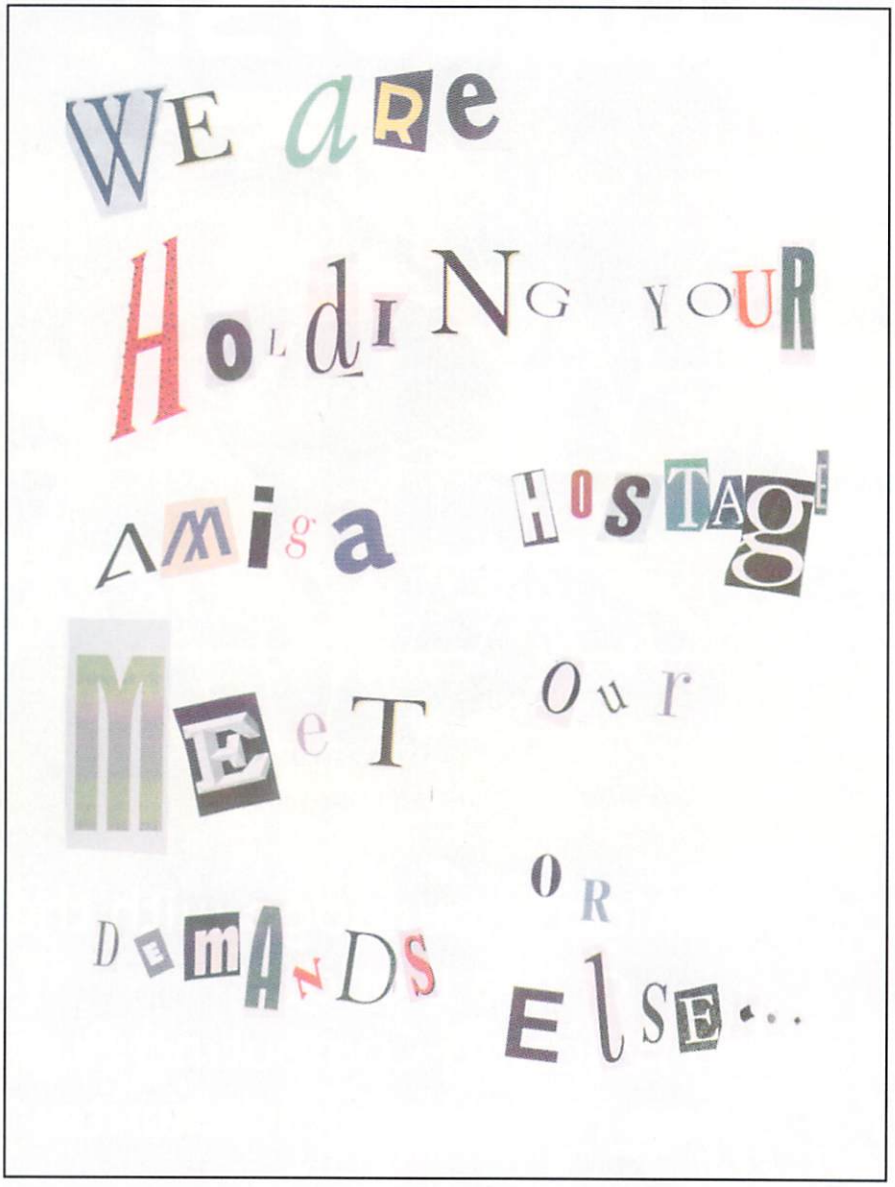


Share your Amiga knowledge with the rest of the world.
Become an Amazing Computing Author.
For a free Author's Guide write:

Author's Guide
Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140

or call:

1-800-345-3360



Some magazines
only tell you what *they* think
you should know...

Amazing Computing tells you **everything!**

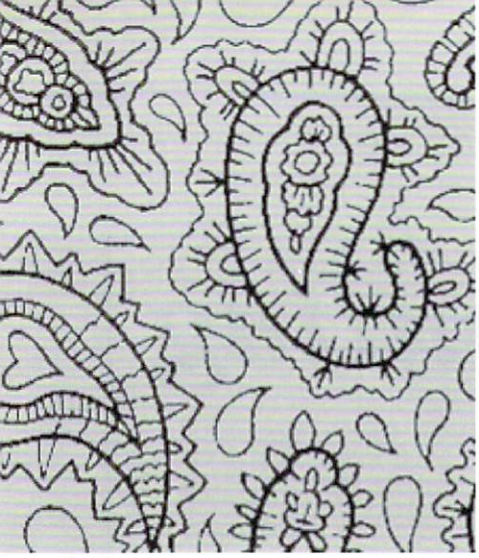
Amazing Computing provides its readers with in-depth reviews and tutorials, informative columns, worldwide Amiga trade show coverage, programming tips and hardware projects. AC brings the most comprehensive coverage of the Amiga to its readers.

AC's TECH is the only disk-based Amiga technical magazine available! It features hardware projects, software tutorials, super programming projects, and complete source code and listings on disk. AC TECH leaves no stone unturned when it comes to Amiga technical information.

AC's GUIDE is recognized as the world's best authority on Amiga products and services. Amiga dealers swear by this volume as their bible for Amiga information. With complete listings of every software product, hardware product, service, vendor, and even user groups, *AC's GUIDE* is the one source for everything in the Amiga market. AC's GUIDE provides the Amiga user with a fortune of knowledge.

For a better sense of Amiga direction, call

1-800-345-3360



The classifications of fonts

The first font classification is based on what characters are in your fonts. Some fonts contain Roman characters, some Japanese, some pictures, and some even more exotic symbols. For the most part, you will be using fonts that contain Roman characters. If you are publishing for the English/American market, then you can be assured that most of the fonts you are using will include the characters you need. If you are trying to publish for other common languages that use the Roman characters, you may find your fonts lacking. The standard Amiga fonts include the characters needed for such languages but often public domain fonts do not. The project we will be doing in this article, a sample type sheet, is very useful in testing fonts for these characters.

The ideal standard for Roman fonts is the ISO-Latin 1 set pictured in Figure 1. This set is suitable for the following languages: Afrikaans, Breton, Danish, Dutch, English, Finnish, French, Gaelic, German, Icelandic, Indonesian, Irish, Italian, Lapp, Norwegian, Portuguese, Spanish, Swahili, Swedish. By using such a strong character set, the Amiga is well-suited for international usage.

Generally, serif fonts like Times are used for books and newspapers. In fact the name Times comes from the newspaper that the font was originally created for. It was designed to pack the greatest amount of type in the smallest space while preserving the greatest legibility. San serif fonts are also used as body fonts, but less often as they give the finished piece a more "modern" look which is not always desirable.

The opposite of body fonts are display fonts. Display fonts are fonts that either have a lot of ornamentation like Fraktur, are so distinctive that they distract from the text, like Surf Style or the font is too delicate to be readable at small sizes, like Murray Hill. Display type is used for headlines, short blocks of text, or in special work where the font is used to set a particular mood. It is very important not to use display fonts as body fonts. The result will be a document that is virtually unreadable and amateurish.

For many people that are just starting out, display fonts prove to be a double temptation. First, the display fonts are much more interesting-looking than the body fonts. Second, since there are so many to choose from it is tempting to use several at once. Both of these traps are important to avoid. The first two commandments of desktop publishing should be :

1) Thou shalt not use a display font as a body font

2) Thou shalt not use more than three fonts on a single page.

As in any design situation, rules are meant to be broken, but in general they should be obeyed.

Finally there is one last classification, letter spacing. Most fonts are variable spaced, meaning that each character may be a different width. Traditionally an 'm' is wider than an 'i'. In some cases though, it is desirable that every character be as wide as every other.

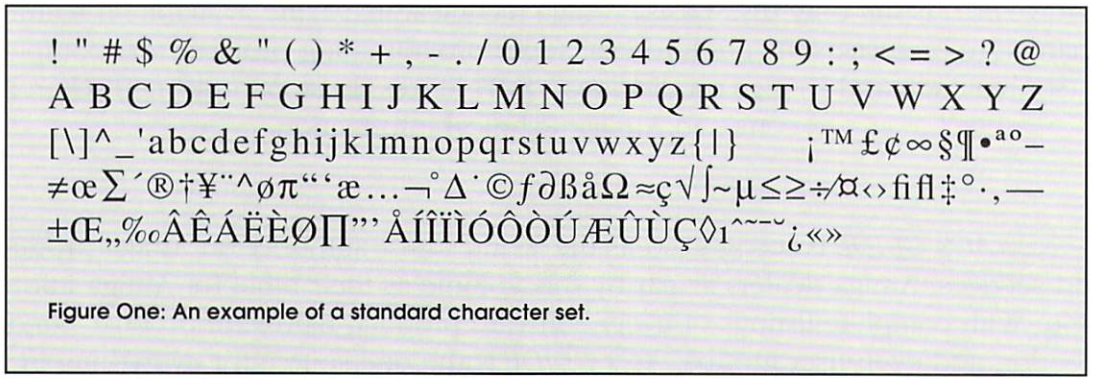


Figure One: An example of a standard character set.

The next most important classification of fonts is based on the visual characteristics of the characters. The first grouping is according to the use of serifs. A serif is an artistic extension at the end of a character's stroke. This is easy to discern in a font such as Times. The letter T has serifs at both ends of the top bar and at the base (Figure 2). Serif fonts can be broken down into smaller categories depending on the style of the serif, but for the most part this is unimportant.

The counterpoint to serif fonts are sans serif fonts. Sans serif literally means without serif—with that being the primary distinction. Diamond and Triumvirate on the Amiga are sans serif fonts. As shown in Figure 2, a 't' in Triumvirate lacks any sort of ornament or extension at the ends of the top bar or base.

Another way that fonts are classified is according the purpose the font serves. Fonts that are used for long blocks of text are known as body fonts. Body fonts may be either serif or sans serif fonts.

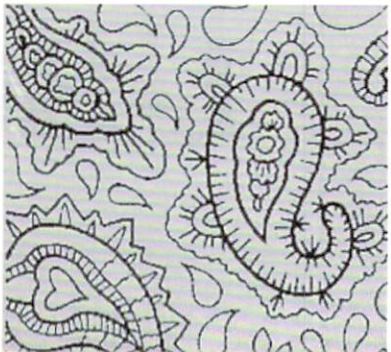
This makes columns, such as in financial reports, very easy to align. There are very few of these monospaced fonts, the ones with every character the same width. Courier is one such font.

Using fonts

Now that you understand the major classifications of fonts, let's look at how and why you would use different fonts by looking at some example projects.

Magazine

In a magazine, it is important that all the body type be the same. This builds up the identity of the magazine, and lets the eye quickly pick out what is part



of the magazine and what is advertising. Changes in fonts could be used to highlight special sections such as side notes or captions, but should be used sparingly. Generally, a serif font would be used for good readability. A traditional font would be good for a traditional magazine, while a youth-oriented magazine should choose a more modern font.

Business Form

With a form, fitting the most type in the least space is usually not an issue. Instead, the legibility is the most important issue. Sans serif fonts such as Triumvirate and Franklin would be excellent choices. While it may seem better to use all uppercase letters in a form, it will actually be easier to read if lowercase letters are used, except for capitalization.

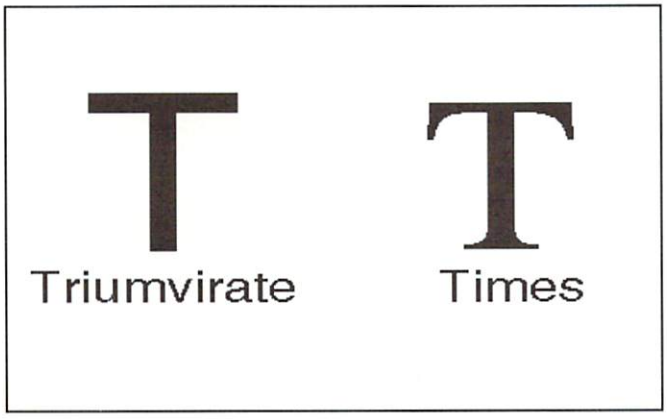


Figure Two: The difference betwen a Serif and Sans Serif font.

Advertisement

An ad is the place where display fonts are most commonly used. A display font will grab the reader's attention and draw them in. After the reader is drawn in, a body font should be used for the copy unless there is very little to be read. The display fonts used in ads should be chosen carefully to communicate the same idea as the ad. A font with an old-English (black letter) look would be a good choice for a restaurant called Henry VII, but not Joe's Pizza. Since the reader is usually only skimming past an ad, it is important to send the right message.

Project: Font Sample Sheet

Many people have a large collection of fonts, but only use the fonts they are most familiar with. One way to become familiar with your fonts is to create font sample sheets. This is a simple project, and one that can prove to be very useful.

First create a page 8.5" x 11" in landscape (sideways) orientation. For this project it is desirable that we have more width than height. Next go to the master page and put in titles along the top for Name, Style, and Size. By placing these titles on the master page, they will be on all pages with no extra effort. You may also want to add a short checklist to the side that includes: Serif, Sans Serif, Body, Display, and Monospaced. After a short while you should be able to just glance at a font and determine this, but you may want to classify your fonts to sharpen your skills.

Now move to the first page. Create a column that takes up most of the page except for .5" margins and where your titles will be. Switch fonts to the biggest or most ornate font you have. This font will allow you to gauge what point size you can use for your sample sheet, as it is the "worst" case. On the first line of the column type:

!"#$%&?()*+,-./0123456789:;<=>?@[\]^_'{|}

Next type the alphabet in uppercase, then lowercase.

At this point you have entered most of the characters you will ever need if your audience is English-speaking. But, as mentioned earlier, the characters in the ISO-Latin character set can be used by many languages providing the international characters are available. Unfortunately different programs on the Amiga have different ways of handling these characters. In *PageStream* many of them are available through the control-C and control-D key sequences. To help out in finding the characters you need, PageStream comes with a template that lists the characters available. Other programs do not currently include such templates, so it is a bit more of a challenge to find these characters.



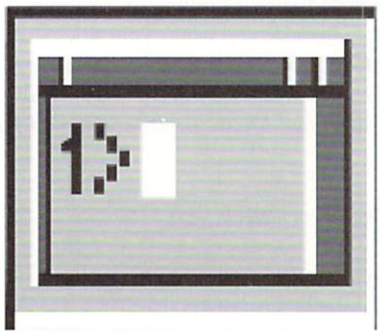
After you have assembled a display of the characters you have been able to find and are likely to use, fill in the font name, style (ie: Bold, Italic, Outline), and point size. If you have the checklist on the side, fill that out as well. Now you have completed a single font sample sheet. Save the document and print it. Next, select all the characters in the sample and change them to another font. For body fonts, you may want to add a line or two of sample text so that you can see how the font looks in a line. Just about any line of typ,e such as "The quick brown fox jumped over the lazy dog," will do. Print this sample and repeat the process. You may want to have each sample as a separate page in your document, but this is not really necessary unless you want to print multiple copies of your font samples. Over time the document could become too large due to the number of fonts in your collection.

Fonts in design

There is much more to using fonts in design than simply knowing which fonts are sans serif or body fonts. In the future we will be using fonts as parts of designs and looking at how kerning and leading can effect the appearance of a font. But in the meantime this article should help you make better use of the fonts you have.

•AC•

Please Write to:
Dan Weiss
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140



cli directory

by Keith Cameron

Handling the Amiga's system fonts

In recent columns, we have looked at numerous ways to customize your Amiga. This has concerned things as varied as mouse speed and screen color. This month, we will examine how to change the fonts that appear on your screen. The three programs that are available for altering font selection are FONT, FIXFONTS, and SETFONT.

FONT is another of the many editors we have been examining in recent months. As with the other editors, it is located in the Prefs directory. It is used to specify the font used by the system. It is mainly intended for people with hard drives, as floppy disk system users are limited to Topaz in ROM. You can, however, move some fonts from the Extras disk to your system floppy. There's a catch here, though. Since the system floppy is almost full as shipped, you will have to delete some files from it first. When doing so, be sure that you are working with a backup in case you delete something you shouldn't. You might wish to refer to a couple of back issues before doing this. I wrote an article, "Stripping Layers off Workbench," for the November 1990 issue of *Amazing*. It mainly concerned system 1.2, though. In the October 1991 issue, Jack Helser used the same title to deal with another approach to the same topic, this time with emphasis on Workbench version 1.3.2. Both of these articles deal with creating room on a system floppy by deleting unnecessary programs. Although neither of these articles deals with version 2.04, a similar approach can be used if you are confident enough to take the initiative. Additionally, the manual that accompanies version 2.04 gives some tips about what to delete in such situations, so you may refer to that as well. This information can be found on pages 69-71 of Chapter 7, "Using AmigaDOS."

Before examining how to use FONT from the command line, let's examine the window itself. At the top, you see the choices of text where fonts can be changed. Beside each option is a radio switch, which is the circular gadget. Let's look at each text area.

The Workbench icon text concerns only text attached to icons in Workbench windows. The Screen text is the text that appears in any screen, such as in menu bars and menu items, among other places. The System text affects display information. Any changes you make to these will take place upon leaving the editor with the exception of changes to Screen text. For changes in this text to take effect, your Amiga must be reset. In fact, my manual states that if you select USE or SAVE changes in Screen text, upon leaving the editor the Amiga will automatically reset itself. I have not found this to be the case, though. Be forewarned that any changes you make may not affect your word processors or other applications, as these programs often select their own default fonts.

Select one of the text areas. Below the text selection will appear a list of fonts which are available for that text. Once again, floppy disk users may see only Topaz listed. Any of these fonts can be used with your Workbench and Screen text areas, but only proportionate fonts can be used with your System text. A proportionate font is the kind of type used on older typewriters, where each letter or character takes up the same width. Thus, a period would require the same space needed to make an "m." Therefore, if your choice of fonts is not used, it could be that the font is not proportionate. To the right of the scroll gadget is a space where examples of your font choice appear for your inspection.

One option you have with the Workbench icon text that you don't have with the others is the selection of color to be used for the text and its background, or field. If you don't like the choice of colors, you can use your SCREENMODE editor, discussed three months ago, to adjust the colors.

As with other editors, you can then use the action gadgets at the bottom of the window. You can also save files using the items from the menu. I won't discuss these as I have dealt with them extensively in previous columns.

You can use FONT from the command line in the same manner as the editors previously discussed in my columns for the past two months. To simply open the window, just type the FONT command by itself. For other options, here is the format:

FONT [FROM <FILENAME>] [EDIT] [USE] [SAVE] [WORKBENCH]

[SCREEN] [SYSTEM]

To bypass the window, you can use the FROM, USE, or SAVE switches, as with other editors. Of course, the FILENAME is a file

previously created with font settings. You can call up this filename and specify where to use it.

FIXFONTS is in the System directory. It is used to update the .font files of the Fonts directory. No arguments for it are necessary; simply type FIXFONTS on a command line and execute it.

This program should be run after you add any fonts to your fonts directory. Basically, the program updates the fonts directory and its files. If you add new fonts to your fonts directory but do not use FIXFONTS, you will notice some odd results. For example, you may notice that the new fonts appear in the FONT editor window immediately after you have added them, but that the next time you open the FONT editor window, they are not listed. It is also possible that, although they don't appear in the window, they are still being used in either the Workbench or System text areas. Basically, this command causes your computer to recognize that the new fonts exist on your system.

Another thing I noticed in working with my fonts directory concerns the use of an ASSIGN command in my startup-sequence. I had added an ASSIGN command to assign my fonts to a fonts directory on a separate disk. As a result, the fonts on my system disk, which I was using for my Workbench and System text areas, were not being read. By deleting the ASSIGN command line from my startup file, though, this problem was quickly solved.

Our final program is SETFONT, which changes the Shell font. Perhaps you are tired of working from a Shell screen that uses the default. Now your command line can use Garnet, Sapphire, or another font. You can also specify the size, such as 9 point or 12 point, as well as the style, such as bold or italic. The format for this command is

SETFONT <SIZE> [SCALE] [PROP] [ITALIC] [BOLD] [UNDERLINE]

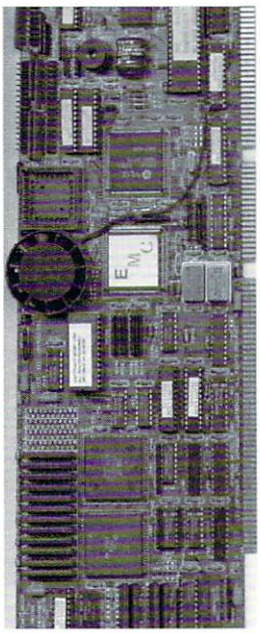
SETFONT is located in the 'c' directory. If you open another Shell window, the new font will not be in force; instead, you will see the default. If you try to execute this command and get an error stating that "object is not of required type," then try running the command again using the PROP switch. PROP refers to proportionate font, which was discussed earlier.

Changing fonts can vastly alter the appearance of screens on your computer. While perhaps not serving any really useful purpose, such a change can make using your computer a little more enjoyable and interesting.

•AC•

Please Write to:
Keith Cameron
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140

Getting a 486SLC BridgeBoard?



Well don't get *SUCKED IN* to buying a slower, less compatible board.
Introducing Elite MicroComputers 486SLC 33MHz Bridgeboard, based on Commodores A2386SX. Just look below and see how we *BLOW* vortex away.

	EMC 486SLC	**Vortex 486SLC**
Speed	33 Mhz	25 Mhz
Landmark 2.0	103	71
Norton SI	66	45
Standard Ram	3 MB	2 MB
Price per MB	$36	$65 !!!
CPU cooling method	FAN!	Heat Sink
Janus 2.1 compatible	YES!	no
MS-DOS 5.0 included	YES!	+$65
386sx to 486SLC upgrade	$650	no
Floppy Controller	YES!	+$89
Shipping	Next Day	+$30
"*EQUAL*" Boards	*$1200*	$1350!

C= + EMC = 486 POWER!

That's right! All the quality, and compatibility you need from Commodore. With all the performance you want from EMC. Need more features?
Enter the Super Multi I/O board.The ONLY answer to an A3000 owners prayers. It includes: An IDE harddrive controller, 2 serial ports, 1 parallel port, 1 3 button LOGITECH mouse, and a SVGA video card. All on one 16-bit card.
The ORIGINAL....The FASTEST !!!! EMC's 486 SLC BridgeBoard.

EMC 486 SLC w/ 3mb	$1200	Super Multi I/O	$280
w/ 8mb	$1420	with purchase of 486SLC	$200
A2386SX with 1 mb	$550	80 mb IDE HD 12ms	$245
386SX to 486SLC upgrade	$650	210 mb IDE HD 12ms	$365

EMC

Voice: 908-541-4214
Fax: 908-541-6348
Compuserve: 70322,447
GEnie: XKY74135

Elite MicroComputers
138 Turner St
Port Reading, NJ 07064

VISA MasterCard

Circle 102 on Reader Service card.

THE VIDEO SLOT!

by Frank McMahon

This month in the Video Slot we're going to examine the basics of getting started in Amiga video. A simple setup can mean a camcorder, a few VCRs, and an Amiga. While it is simple to put together, retail merchants have a dizzying array of options to choose from. Armed with the facts, it's not very hard to put together a very nice editing suite.

First Things First

Before you even purchase your first piece of equipment, decide *what you're going to do with it*. It sounds simple, but many people invest in the wrong type of equipment, finding out later they need the features of a model they initially passed up. If all you're going to produce is some simple home movies with some basic graphics, you can usually get by with a few VHS VCRs, a VHS Camcorder, and an Amiga 500/600. While low in quality, it will also be very low in price and provide a good chance to get your feet wet. If you'd like higher quality, and perhaps want to use the equipment for commercial means, then a Hi-8 or SVHS setup with an Amiga 4000 may be up your alley. The main point is not to overspend. Even worse, don't underspend because you'll waste valuable time on equipment that is not up to your product. It's best to sit down for a few minutes and decide what your long and short term goals are going to be with you new video suite. Also decide on how much you want to spend. Set an amount and try to stick with it.



One of the first choices to make is the format you intend to use: VHS, SVHS, 8mm, or Hi-8. VHS and 8mm are low-resolution formats (about 250 lines) while SVHS and Hi-8 are high-resolution formats (400 lines or greater). VHS is the nation's standard, which goes to show our standards are not very high. Keeping this in mind, VHS looks pretty good to most viewers. However, a master tape really starts to lose resolution as a second or third generation dub. If you plan to do any editing, then VHS is not a great choice. Second generation is barely tolerable, but third generation really falls

This Month: Getting Started in Amiga Video Production

apart. Of course if you only plan to view just your masters, then the quality may be acceptable; however, you won't be able to piece your work together through editing or add some snazzy Amiga graphics to complement, so that's no fun. The good thing about VHS is that camcorders are really inexpensive, making startup costs minimal. Also the camcorders are bigger than 8mm. An 8mm camcorders is a lot harder to keep steady if you're shooting off the shoulder. Even on a tripod they are usually so small that all the controls are grouped together and not easily accessible. For professional or even home shooting, a larger camcorder is definitely recommended.

As for 8mm, it is not a standard home format as yet and probably never will be. But it is hugely popular and is now outselling VHS as far as camcorders are concerned. As mentioned, its smaller size is really not a benefit for video production. Its quality is similar to VHS, but in my experience I've found it to be just a bit higher quality than regular VHS. The other side of the coin is that because of its smaller tape size, dropouts normally undetectable on VHS show up on 8mm. As long as you store your footage in good condition and take care of your cameras and tapes, it usually isn't too big a concern on any format. For basic home productions, it's probably best to stick with VHS—a setup with camcorder and VCRs will be cheaper in the long run than a similar 8mm suite. Plus it's a standard that you will be automatically compatible with, rather than having to transfer 8mm to VHS everytime you want to take a tape over to your neighbor's house. Another option is to use an 8mm camcorder and a VHS deck, using the camcorder as your edit source deck. In fact, *Video Director* by Gold Disk lets you use the Amiga to run exactly that kind of set up for editing.

With Hi-8 and SVHS I would have to automatically recommend SVHS for several reasons. Hi-8 has been very slow in getting off the ground. I know CNN used a lot of Hi-8 camcorders during the Gulf War, but that was mainly due to the ability to carry and conceal the unit easily, since they are much smaller than a similarly equipped SVHS camcorder. The quality is about the same but the dropout problem remains as mentioned above. SVHS has grown and improved steadily over the years and is now accepted at most cable and TV stations.

SVHS editors are varied and there are numerous models to choose from, while Hi-8 has limited choices when it comes to an array of editing machines. The vast success of 8mm in the consumer marketplace has not crossed over to a wide acceptance of Hi-8, due mainly to the compatibility issue. You could edit and shoot regular VHS with SVHS equipment if you wanted to, making it somewhat more compatible than Hi-8. However, Hi-8 is still young as far as video age and anything can happen down the road, but until it does, sticking with SVHS is the safest bet.

Camcorders

After you've chosen a format the next step is to get a camcorder. My best advice is not to jump towards a model with a slew of features; instead get a better quality unit with minimal features. Remember, you are paying extra forevery option and you'll find out later that most of them you'll never use. Here are some of the many options you'll come across:

FADE—not needed if you are going to use an Amiga; your genlock can fade up and down.

8:1 ZOOM—pretty good but 10:1 is better. The higher the first number the more your camera can zoom in.

DIGITAL EFFECTS—Mirror, strobe, mosaic, etc. You'll be amazed at how quickly all these neat effects lose their appeal. Believe me, you *don't* need them. It makes your videos look cheesy and it costs you extra money.

CHARACTER GENERATOR—Another waste. Even if you don't



have an Amiga, most in-camera character generators look blocky and awful.

DIGITAL ZOOM—This one will always trap unsuspecting buyers. It sounds cool but actually it blows up the image electronically and zooms in with a tremendous loss of detail. It's kind of like going from Amiga hi-res to lo-res. You're better off getting an optional zoom lens at a camcorder dealer.

MULTISPEED ZOOM—An essential, It does just what it says—allows the operator to set the zoom to zoom in at a varied speed, usually slow and fast.

VARIABLE SHUTTER SPEED—Most misunderstood option. Basically the shutter can go past 30 frames per second to multiples of 100. In slow-mo the frames can be easily seen with no blurring; however, the effect gives normal video a jerky strobe effect that is generally undesirable. You'll see a high shutter speed on most network sports games.

MANUAL OVERRIDE—*The* most important feature is to have all or most of your buttons have a manual override option. You need to disable the auto focus, or manually set your color balance. A camcorder that is all automatic is incredibly frustrating after a while.

BACK LIGHT—Handy feature to compensate for a really bright background.

LOW LUX—Nice to have. A lower lux, say 1 or 3, means it will operate in very low light conditions. A higher lux, 10 or more, is not nearly as versatile.

AUDIO/VIDEO INPUTS/OUTPUTS—You can run video in such as a VCR or Amiga graphics or take audio out. Lots of possibilities. A recommended feature.

FLYING ERASE HEAD—Basically provides glitch-free in-camera editing. Not as important if you're going to later edit on a VCR. Plus 90% of camcorders have them as standard now anyway.

TBC—good to have (corrects sync errors) but it's better to put the money of a TBC in your edit system rather than in your camcorder.

There are other features but the bottom line is just to pay for what you need. Some fancy features may seem enticing at first, but realistically try to gauge just how often they will get used. Also try the camcorder out at the store, make sure it feels comfortable. If you are left-handed ask for a model which supports the use of both hands; most support only the right. A big viewfinder is always a plus. If you are squinting in the store, then you will surely be squinting after a few hours of shooting out in the field. Don't forget to get a tripod—and don't forget to *use* it.

Decks

Getting a set of edit decks is a little trickier than picking out a camcorder. The most basic type of editing is synchro editing. Many VCRs feature this option although it's not highly promoted. Basically you use the remote or hit a button on the record deck and both decks start up and do the edit. It's not too accurate, but it gets the job done. The next step up is decks with pre-roll. Similar to synchro, this time the decks both back up for five or so seconds to perform a cleaner and more accurate edit, a running start so to speak. Chances are you'll have to get two of the same type of VCR to do any real editing. It may be beneficial to look into industrial VCRs for editing purposes. They may be a little more expensive, but the editing options will be more complete, being a priority rather than an add-on as with the consumer divisions. Editing techniques and methods by different companies are beyond the scope of this article, since almost everyone does it his or her own way with their own decks. There are numerous Amiga editors available and it might be wise to start there and call some of the vendors specializing in Amiga editing to see what decks work with their software. The king of the home editors has been the Panasonic AG-1960 SVHS decks. I have a pair and I recommend them highly for most general basic editing. This past year, JVC released their answer to the AG-1960 with a couple of models in the same price range but with more features including some phasing effects (black & white, color balance, etc.). I've used these decks at our cable studio and have been very impressed. Sony also has some very nice editing decks for 8mm that are very inexpensive. It's best to stick with names such as JVC, Panasonic, and Sony as well. They have a large variety of editing VCRs and have a good reputation behind them.

The main feature to look for is a deck that will do audio and video insert editing. Most decks do assemble editing, which is fine for general purposes like making a dub of a whole tape. Assemble editing is kind of like a video snowplow. It lays down video from start to finish. Insert editing is different in that you start with a tape that *already* has a video signal (such as a black burst signal) and then put in pieces of audio or video here and there—incredibly more flexible. So some decks may say they feature editing but if it's only assemble editing, it's not very useful. Definitely ask for insert editing as a feature if you want to get any serious work done. Make sure that you can play back the audio from the linear and the hi-fi tracks at the same time. When you make an edit, you usually lay down audio on the hi-fi track—the audio track that resides *under* the video signal. Later if you wish to dub in, say, narration, you'll put it on the liner track—the thin track near the edge of the tape. Not all decks allow you to play both back at the same time. In fact the only drawback to the AG-1960 is that you can listen to the audio from the hi-fi or the linear track but not both at the same time, though third-



party hardware add-ons have rectified this situation). So try to get a deck that allows monitoring of both.

Amigas

There are many Amigas to choose from with the new models highlighting advanced features and older discontinued models being sold at discount rates. It's best to decide what you want to do before you go ahead and upgrade or purchase your first Amiga. The Amiga 600 is the new low-end computer and is great for genlocking simple graphics but does not have the speed or expandibility for demanding applications. The Amiga 1200 is a much better alternative with a speedier processor and advanced graphic modes for more realistic graphics. The price difference is not really that much and it is a much better buy to spend the extra and get the 1200. As for the 500, it is now as low as $299 in some places and you really can't beat that for great deal. Although lacking the features of the new line of Amigas, it already has 100s of hardware options available and has grown quite popular over the years. If price is an issue, then a 500 would be a much better investment at this point than a 600. The Amiga 2000 has come way down in price to almost as low as a 1200. The advantages are much more expandability with current hardware. The drawback is older architecture that is not as advanced as say the 1200. Plus it does not have the new graphic modes such as the 1200. It's a close call but it's probably better to stick with a 1200 for a little less, than spending more for a 2000. The near future will bring a slew of expandable options for the 1200 and its technology is the future of Amigas, where the 2000 is slower and yesterday's technology. The 3000 has also come way down in price but I can't think of a great reason to buy one. Costing twice as much as a 2000, it would make more sense for video work to get a 2000 and spend the extra on a good genlock. As for the 4000, if you have the money, you won't find a finer video computer than this one. To sum up: If you have a modest VHS setup for home use, a 1200 is the machine to get; if price is an issue, then the 500 over the 600. For a good SVHS system, then a 1200 over the 2000; there will be less expandibility but it will be faster with more vibrant color modes. If your system is becoming a major commitmen,t then complete the suite by adding an Amiga 4000.

Conclusion

One final suggestion and that is to do your homework. Don't wander into a dealer and hear his or her view of what they think you should have. Plan your goals of what your suite is going to be used for and then *read*. Read every video magazine you can get your hands on. Check out reviews, compare features and options, and then decide what brands or models you want. Visit local studios or cable stations and see if you can get some advice as to what are some good models or brands. Don't be afraid to build the system a piece at a time. It make take a while to create what you feel will be the ideal video suite. But after it's done, and you're armed with a camcorder, editing decks, and Amiga, the sky's the limit.

•AC•

Please Write to:
Frank McMahon
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140

Computer Port



Amiga Productivity

Brilliance	139
DPaint 4.5	139
Taming the Wave	89
Opal Vision W/Imagine2.0 limited	899
Morph Plus	162
Art Department Pro	169
Directory Opus NEW	69
PageStream 2.2	170
Art Expressions	139
Hot Links 1.1	89
ProPage 4.0	189
ProDraw 3.0	129

We Now Have SEGA!

Genesis	99
Eco Dolph	44
Sonic 2	42
Madden'93	49
St of RageII	57

Call for any Sega Game!

Simple Policies
Prices and availability of product are subject to change without notice. Defective items exchanged for same item only. Return Authorization Required. Exchanges on unlike items at our option with a 20% Restocking fee. Shipping and handling based upon actual UPS shipping charges. Visa, MC.

Sega CD Only 279
Includes $300 Software Value Pack
Sherlock Holmes, Golden Axe
Streets of Rage, Revenge of Shinobi
+ 2 other Games & 2 CD's

WIN A FREE AMIGA

New Amiga Games		Amiga Hardware	
Bills Tomato Game	33	Video Toaster	1960
Pinball Fantasies	33	Epson Color Scanner	989
Civilization	39	DPS TBCIII	779
Lemmings Tribes	39	DCTV	379
Fighter Duel Pro	39	213meg SCSII HD	369

Order Line
1-800-642-0665

The Mystery Begins

Computer Port BBS
(803) 587-0912
Download CP Shopper "CPShop.Lzh". It's a Mystery!

Small Print. Like all companies we too have small print. It is very very small. So small, in fact, that most people never read it. However, this is very important small print. So very important, if you don't read it, you will never know the secret of Mib 'O' Mok. Don't blame me if you can't read the print. I can not be held responsible for your inability to acquire a micro-scope. So go eat your Spam sandwich and don't blame me. This month's hint to solve the mystery is to call Computer Port BBS, log on and read the messages in the Mib'O'Mok message base. Yes the BBS is long distance, but hey what do you want, the access is free. Besides, you might just win something. I will now put an end to the small print. For some reason the people of this publication want me to give them money for printing this stuff, so I guess we are not considered the elite. Just who do they think they are? Well, I guess they aren't too bad, they do print a magazine about Amiga computers. You won't find anything in here about washing mushrooms or even the preparation of trout, nope, just Amiga stuff. So let's give a big round of applause to the wonderful staff at PIM. Ha, Ha! I hope you weren't in a crowded room when your applause went out of control. If so, run and hide before the big men in the white jackets give you a house call. Ok, this is really all the space we have. See ya next month, same spam time, same spam channel. (White Space)

Circle 101 on Reader Service card.

Make Your Productions Look Like A Million Bucks For Only $99.



Upgrade your AmigaVision™ to the new AmigaVision Professional for only $99.

AmigaVision Professional is ideal for interactive courseware designers, multimedia developers, point-of-information displays, and business, government, and educational presentations.

With over 100 new improvements and features you'll save time and money. But it'll look like you spent a fortune.

Call CommodoreExpress at 1-800-448-9987. And start making million dollar productions without spending a million.

Feature Highlights:

- Supports new AGA™ colors and resolutions
- Freely redistributable runtime player included
- Controls full motion video devices and CD-XL motion video files
- Plays a MIDI file out to a MIDI device or Amiga audio channels
- New resolution-independent transitions
- Streamed-in animations and sound files mean faster loading and reduced memory usage
- Word and character recognition allow hypertext browsing in text windows
- Enhanced object editor now has control panel functions
- Additional database functions

Commodore® AMIGA®

© Commodore Business Machines, Inc., Commodore, CommodoreExpress, and the Commodore logo are trademarks of Commodore Electronics, Ltd. Amiga, AmigaVision and AGA are trademarks of Commodore-Amiga, Inc.

Circle 107 on Reader Service card.

bug bytes

The latest in tips, workarounds and upgrades

by John Steiner

THE MAILBAG WAS full this month, and there was a lot of useful information provided by our readers. Thanks to all of you who take the time to write and let others know of the solutions to those knotty problems.

product: Photo CD
re: Amiga support
source: EMail

First, in the lack of industry support for Amiga department, I received an E-Mail letter from Luis Resto of Rochester, New York.

Mr. Resto has been asking Kodak to support the Amiga platform on their new Photo CD development systems. He commented that there have been a few people who have volunteered to assist in development of an Amiga platform solution, but management at Kodak plans to support only Macintosh and IBM development. Luis recommends that Amiga owners who are interested in seeing this powerful graphic tool be made accessible to Amiga users complain loudly and vociferously to Kodak about their wishes.

product: 68000-based Amigas
re: speeding up processor
source: EMail/letters

Several readers wrote in response to the January 1993 Bug Bytes mention of increasing the clock speed of a 6800-based Amiga system. Of the several letters, I have selected to reprint the information provided by Marc Crouse. His E-Mail letter was concise, clear, and on point. He writes, "First of all the upgrade (mentioned in the column) is possible, however the problem is the idea of 'installing a new crystal'. Doing this would throw the system 'out of sync'. Only one crystal can be used as it is very difficult to synchronize two crystals. Fortunately the A500 uses a 28MHz crystal which can be used to drive a 16Mhz 68000. A 74F74 D-type flip flop can be used to 'divide' the frequency to 14Mhz and when this is run to the Clk pin on the 16Mhz 68000 you are now running 70% faster."

Marc continues, "This operation is not for the timid as you must solder to the Agnus socket. I claim no responsibility for this modification; try at your own risk."

You need to purchase:

74F74 D-type flip flop 16Mhz 68000

a few short pieces of wire

a switch—to switch from normal to accelerated mode

As you wire the following connections, keep the wire as *short* as possible FF <—will refer to pins on the flip flop 68 <—will refer to pins on the 68000 (16 Mhz) De <—will refer to pins on the Denise chip FF11 goes to Agnus34 FF12 goes to FF8 FF10 and FF13 go to +5 volts Insert the 68000 (16) into the 68000 socket with pin 15 bent out (clk pin) and connect pin 15 to the center of the switch (a dual setting switch or rocker). Connect one side of the switch to FF9 (when this is connected the faster clock rate will be used) connect the other side of the switch to pin 35 on the Denise chip (for normal operation).

Mount the switch so that it can be used when the 500 or 2000 is closed.

The switch may be used during operation but will cause a system crash... Reboot and all should be OK.

Marc also was interested in finding out whether or not there are any plans of releasing an AGA upgrade for the 3000. I haven't heard anything definitive on this prospect, but if any readers wish to respond, I'll pass the information along. I've used a DCTV unit with my A3000 regularly, and find that it provides all of the colors I will ever need for my presentations. The DCTV works very nicely with AmigaVision and has the advantage of not displaying standard Amiga screens during presentations. Your audience will only see the images they are meant to see.

Mark Odell also wrote about the processor accelerator information request. He noted that there is a file that has been floating around on the bulletin boards and information services "under the name '14MHZ.LZH' or 'A500ACEL.LZH' or something similar." That file contains complete descriptions of the process, and many comments of importance to those considering the modification, including the comment that the modification will probably not work properly on certain specific Amiga systems. There is apparently no sure way to tell which systems will and which won't work properly until after the modification is completed.

product: ParNET
re: ParBENCH update
source: EMail

Vernon Graner of Austin, TX sent E-Mail regarding the fact that he has recently made available an update to ParBENCH, a ParNET installation disk he created that was recently distributed by Commodore through its dealer channel. The Original ParBENCH (v3.0) had some minor problems that have been remedied by this release. More importantly, the new version of ParBENCH (v3.1d) has been greatly enhanced to work more easily with the CDTV unit and many new user suggested features have been added. The new version also uses CBMs Installer program for a consistent look and feel with other new products, has an option to use a prototype 680x0 optimized version of the parnet.device for greater throughput on accelerated machines, includes the PNet Keys program to allow the use of your host Amiga's mouse and keyboard on the CDTV unit, and it also contains the recently rediscovered ParNET Source Code for hackers to really get into. The interface is simple enough that even complete novices can simply and quickly set up a network. All files contained on the disk are freely redistributable and contain all the documentation. He notes that this disk will be available through the Software Distillry BBS at the following numbers:

919-851-9937 2400 baud

919-233-9937 14.4 V32.bis

919-859-5316 9600 V32/HST

The update is on CompuServe in the Amiga Users forum and by the time you read this, will probably be found on other services and BBSs. The filename to look for is PARBN31D.DMS

product: SaxonPublisher
re: Saxon Industries
source: mail

Charles Andreas of Medicine Hat, Alberta, Canada wrote that it appears Saxon Industries, developers of *Saxon Publisher* and *SaxonScript Professional* are no

longer in business. When he sent in his warranty card for SaxonScript Pro, it was returned marked "Moved - address unknown." He made several inquiries looking to see where they might have moved, but to no avail. He does note that the products are continuing to be sold, without apparently the benefit of any future support. If you know of service or support for Saxon products, let me know, and I'll pass the information along.

Mr. Andreas also notes that *CrossPC* from Consultron has problems with mouse support. The people at Consultron have told him that they are working on enhanced mouse support for future revisions of CrossPC.

product: Baud Bandit
re: 2.1 Release

Baud Bandit 2.1 terminal software is available from the developers for version 1.5 owners by returning the original disk and sending $15.00. If you are using version 2.0, you should return it for a free 2.1 upgrade as 2.0 has a couple of bugs that 2.1 corrects.

product: ImageFinder
re: update problems
source: mail

Ken Boi of Glendale Heights, IL writes regarding his earlier letter involving Zardoz Software's ImageFinder upgrade. In December he received an upgrade identified as version 1.1B. The automatic update bug appears to be fixed and the program provides additional graphic file support. He notes however, that he had some problems with index generation under Workbench 2.1. He temporarily switched to Workbench 1.3 to build his index files, and had no problems.

product: AEHD 2.0 driver
re: operation
source: mail

George Zopf of Arroyo Seco, NM wrote to comment on his successful use of Max Woodbury's AEHD 2.0 high-density driver. He noted that the only glitch he has on his system is that he must insert, remove, and then reinsert the high-density disk before his Amiga recognizes the high-density format. Having done that, the drive works properly.

product: A2000
re: serial port
source: mail

Richard Starr of Thetford Center, VT wrote to ask about a problem he is having with his serial port. It seems his A2000 system consisting of a rev 4.4 motherboard, 1MB Agnus, 2.04 ROM, 2090 hard drive controller, two 8up memory boards (2MB each) and GVP Impact II 68030 accelerator card seems to function properly with a modem or null modem to another computer, but won't work with some other accessories. The port does not communicate properly with the Miracle keyboard or with Gold Disk's Video Director L-control cable to his camcorder. His drawing tablet works with the port, but when the driver for the stylus is run, the cursor motion is backwards. If he unplugs and replugs the tablet, this corrects itself. (By the way, this is a very dangerous practice, as the 8520 chip tied to the serial port is easily damaged by this practice.) He notes that all of his peripherals work just fine on his A1000 and A500 systems, and only the A2000 is giving trouble. He has replaced the 8520 chips and traded the Paula chip with the one in his A500. Neither swap fixed the problem.

I remember a similar problem occurring with my A3000. My serial port worked just fine except for a MIDI interface box I had recently bought. There was a blown resistor in the power line that is meant to supply power to external devices from the serial port, and in my case, the MIDI port requires power to operate. I don't know for sure whether or not that same resistor is on the A2000 motherboard, but it's worth checking out. Simply testing for the presence of that voltage with a voltmeter will confirm or deny that possibility. If you have any suggestions for Mr. Starr, let me know, I'll pass them along.

product: AdRAM 540
re: bug fix
source: mail

Richard Papa of Hamden, CT wrote with detailed information on a fix for his AdRAM 540 clock problem. He noted that after several attempts to get his unit working, a technician at ICD told him that there are three electrolytic capacitors associated with the clock circuit. Two of the units are supposed to be the same value (47 uf) while the third is supposed to be 4.7 uf. "Apparently," he writes, "who ever was assembling the boards together didn't realize that one of the capacitors was supposed to be different." Instead of sending in his unit, he purchased a 4.7 uf capacitor locally, and replaced it himself. He notes that the capacitor in question is marked CE3. "If you place the circuit board in front of you and have the connection socket on the left, (the same way it fits into the A500), the capacitor is located just below the socket that goes to the GARY chip board. If you are adept at soldering, you can make the swap yourself, but remember, try at your own risk. The easiest way to remove the capacitor is to cut out the old capacitor and then either de-solder the two leads or just piggyback the new capacitor to the old leads. The board is a dual-sided board, and if you have not had experience desoldering from dual-sided boards, you should either find someone who has, or piggyback the capacitor, as dual-sided boards are easily damaged. Be careful to observe the polarity of the capacitor you are removing before you take it out. They are marked with a + or - designation near one of the leads, and you must reinstall the new capacitor with the correct polarity. "Since I replaced the capacitor, my clock has worked without any problems for over 14 months."

product: Final Copy II & Proper Grammar
re: compatibility
source: mail

Chris Morgan of San Jose, CA writes to report of an incompatibility with *Final Copy II* and *Proper Grammar* version 1.5, both from Softwood. He notes that there is no mention of this incompatibility in the Final Copy II documentation. He notes that if you run a Final Copy II document through Proper Grammar, the document becomes corrupted. Any attempt to correct the damage in Final Copy will result in a system lockup. In reply to Mr. Morgan's letter, a technical support representative noted that Proper Grammar 1.5 is not compatible with Final Copy II. They offered to notify him when Proper Grammar II is available. It will work with either Final Copy 1.3 or Final Copy II.

That's all for this month.

If you have any workarounds or bugs to report, or if you know of any upgrades to commercial software, you may notify me by writing to:

John Steiner
c/o Amazing Computing
Box 2140
Fall River, MA 02722
or leave E-Mail to
John Steiner on Portal
73075,1735 on CompuServe

Realistic Grasslands

Using Imagine

by Marc Hoffman

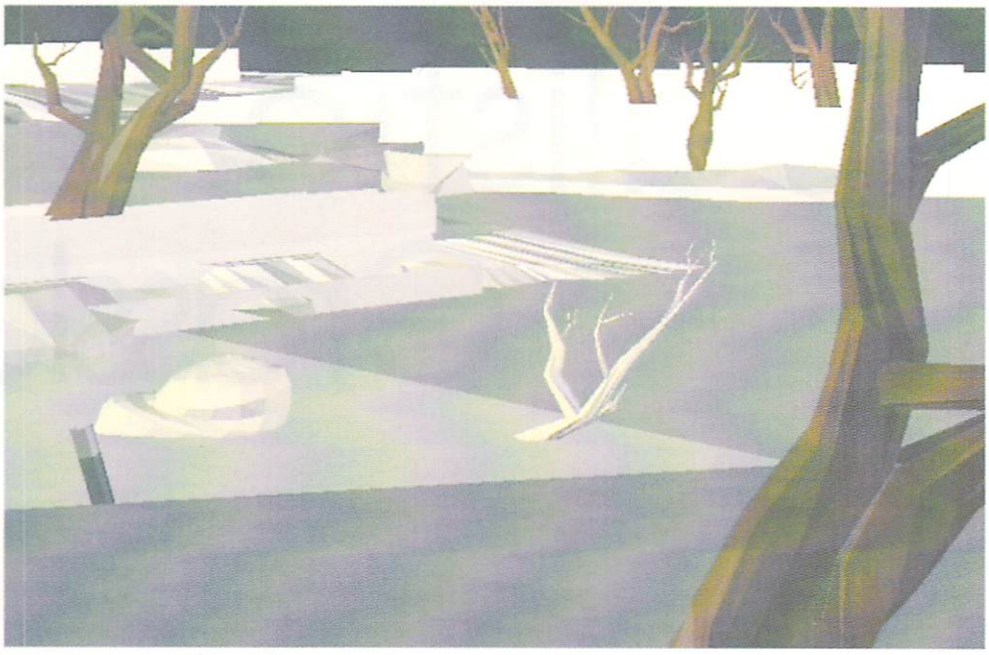
Computer ray-traced images have traditionally been characterized with shiny, mirrored surfaces. Being under the influence of my college art teacher, Don Dernovich, a master landscape painter, I decided to try doing something different: landscape "painting" in *Imagine*. One of the biggest problems with landscapes is the presence of grasslands and other similar plant life. Although this type of structure is constructible within a 3-D editor, it is not very memory efficient. Imagine trying to construct hundreds or even thousands of individual grass blades, and then see just how precious RAM really is. This article offers a much more efficient way of creating these structures using some of the powerful image mapping features found in Imagine.

This process uses three different mapping methods: color, filter, and altitude (bump). Filter and altitude work on a value system of lights and darks, where the lighter values produce different effects than darker values in the final rendered object. In the case of filter maps, the light areas will appear transparent or translucent, whereas the darker areas will render much more opaque. Altitude mapping translates the lighter values of the map to areas of increasing elevation, whereas the darker values appear to decrease in elevation, giving depth to the flattest of surfaces. Color maps simply map an image "as is" onto the object. Knowing these facts, one finds the process for creating realistic looking grasslands to be relatively straightforward. First, a picture of some grass blades needs to painted. Next, the image needs to be converted to a form which conforms to the rules of filter mapping. Finally, the image needs to be changed to a form which is altitude map compatible. Then all of these images may be applied to a flat plane, and voilà!—instant clump of grass!

I painted the picture of the grasslands in *DCTV Paint* (Fig.1) as the first step, and saved this as an IFF24 picture. This picture then needed to be transformed to a filter map (Fig. 2), and this was done using DCTV's Convert section. I set the software to convert the image to two colors, making sure that the background was completely white, and the grassland being completely black. I further enhanced this image by taking it back into Paint. Now when this image is mapped to a flat plane, the area around the plant life will be transparent, while the plant life itself will be opaque. This image was saved as a second IFF file. Next, the original grassland image was taken into Digitize and Process, where I made it a negative. The background has to be black, and the plant life has to be white; now when this image is mapped to the flat plane, the grass blades will appear to stand out, having depth. I then saved this third image (Fig. 3). To conserve both memory and disk space, I converted all of these images to lower bit-plane formats, the

highest being HAM.

After the process of painting and converting was done, I went to Imagine to apply all of these image maps. One rule to remember here is to make sure that all of the images have exactly the same coordinates, so that they line up perfectly. The only exception to this rule is the Altitude setting on the Y-axis. This axis controls the degree of the map; higher settings result in a greater disturbance in the rendered object. Here, a setting of around 7 to 10 is acceptable.



All of this process did not go off without a hitch, as filter maps can perform with some rather unpredictable results. For several days, the so-called transparent part of the map was coming out very opaque! When I put another filter-mapped plane behind the one that was giving me the problem, I got the desired effect: it became transparent. Common sense would state that if an object is opaque, adding another opaque object to the first would worsen the problem. But that's not what happened here. If anyone can tell me why this worked, I would be very grateful. I called Impulse's tech support line, but even they didn't know. At other times, the filter planes would turn white, for no reason at all. Even with all this difficulty, though, a little trial and error can produce some convincing results.

•AC•

Please Write to:
Marc Hoffman
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140



Figure 1.

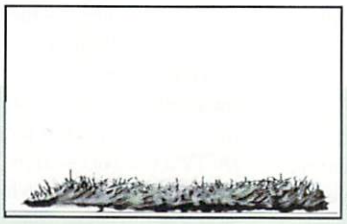
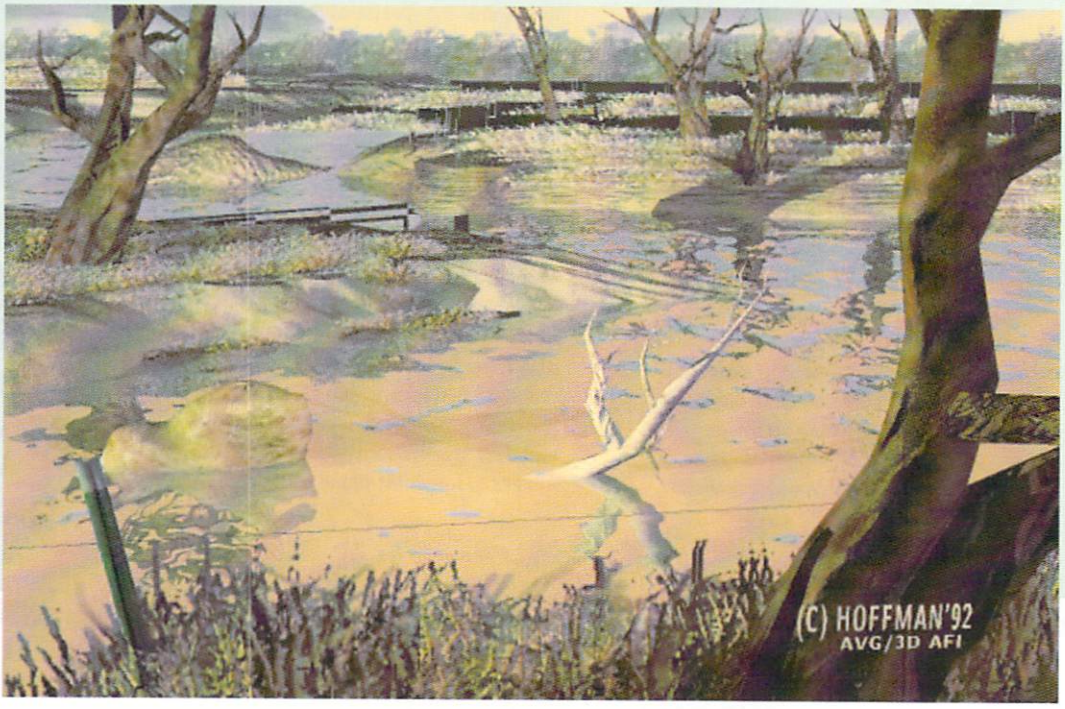


Figure 2.



Figure 3.





High Resolution Output

from your AMIGA™ DTP & Graphic Documents

You've created the perfect piece, now you're looking for a good service bureau for output. You want quality, but it must be economical. Finally, and most important...you have to find a service bureau that recognizes your AMIGA file formats. Your search is over. Give us a call!

We'll imageset your AMIGA graphic files to RC Laser Paper or Film at 2400 dpi (up to 154 lpi) at a extremely competitive cost. Also available at competitive cost are quality Dupont ChromaCheck™ color proofs of your color separations/films. We provide a variety of pre-press services for the desktop publisher.

Who are we? We are a division of PiM Publications, the publisher of *Amazing Computing for the Commodore AMIGA*. We have a staff that *really* knows the AMIGA as well as the rigid mechanical requirements of printers/publishers. We're a perfect choice for AMIGA DTP imagesetting/pre-press services.

We support nearly every AMIGA graphic & DTP format as well as most Macintosh™ graphic/DTP formats.

For specific format information, please call.

For more information call 1-800-345-3360

Just ask for the service bureau representative.



Boost Your Productivity!

Four steps to a more efficient and productive Amiga

We are always searching for a faster, better, more efficient way to perform our daily tasks. With the Amiga as our workhorse, these tasks can be accomplished faster and easier. But how can we do it better? Using a computer does make our work better in many ways. But, there is always room for improvement. How can we make the Amiga more productive so that we in turn increase our own productivity?

There are four basic steps to having a more productive relationship with our Amigas: organize, accessorize, optimize, and educate. With each step, we greatly improve the capability of the Amiga to perform the tasks we encounter.

Organize

It is important.to know where things are and what they are used for. Directory utilities help keep track of file and reduce file access time. A utility such as *Directory Opus* serves many purposes. Directory Opus, for example, will allow you to view IFF files, play animations and sound files, and read text files by double clicking on the file name in the directory window, as well as assign files, applications, and often-used commands to buttons on a main interface screen. This eliminates searching drawers and partitions for the applications and files you need. Most of the organizers available, like *Hard Disk Organizer*, *Quarterback Tools*, and *Disk Master*, perform the same functions as Directory Opus, differing only in options available.

Use a database program to keep track of events, accounts, contacts, and other important information. A good database will put the world at your finger tips. *Contact*, *Superbase 4*, *dBMAN V*, and *Designer* —to name some. Superbase Professional 4 offers features such as forms design, application development, and relational database. It offers support for up to one billion records, new data types and attributes, 4,000-character text fields, logical fields, and PCX and GIF image formats. Import/export formats include DBF *(dBASE)*, *Lotus* WKS, *MicroSoft Excell* XLS format. Most databases share similar features. For the home user, a product such as Superbase may be a little cumbersome. You may want to try a smaller-scale application such as Contact, Designer Database, or *SBase Personal*.

Also along the lines of a database is the personal organizer. These programs are simple databases because they also maintain records like address files, telephone directories, and calendars. This may be all you need if your only desire is to keep track of all your telephone numbers. Organizers such as *Personal Information Manager* and *Secretary* offer schedules, to-do lists, addresses and telephone numbers, "client" information or other data you choose to include with your files. Other organizers are available for more specific purposes. *Personal Video Librarian* will keep track of your video collection, and *Personal Finance Manager* will look after you personal finances, and *The Disk Labeler* allows the user to print customized labels and keep track of the labels which have been printed.

There are organizers and small-scale databases for ever purpose. Business, finance, and personal information are all covered. There are organizational packages available for almost everyone. The home and business environments are well supported with software for day-to-day planning and organizing. The packages are designed to help the user be more efficient. Business and home productivity packages such as Gold Disk's *Office* and *The Works* include all the necessary tools for efficient operation. Items to look for in an overall productivity package are a good word processor, a spreadsheet, a database, and an information manager.

Accessorize

Think of your Amiga as a small kitchen appliance and all your Amiga software as accessories for this appliance. The quality of the accessories you purchase for the appliance will determine the quality of the work it performs. If the carrot chopping attachment has a dull blade, it is not going to chop well. The same goes for your Amiga accessories. Look for programs that offer all the features you need at a reasonable cost. Keep in mind that if you compromise on quality in the beginning, you will compromise your productivity in the end.

Boost Your Productivity!

Word Processing & Desktop Publishing

A good word processor will go a long way and there are many quality commercial products available. Products such as ProWrite, Kind Words, Final Copy, and Word Perfect offer the user a good range of features for a good price. Generally, you will want a word processor that supports saving and importing ASCII text files, has spelling dictionaries, is easy to set up and format documents, and includes all the standard features, bold, italics, tabs, etc., normally included in a word processing package. Some word processors allow the import of IFF files or feature drawing tools for picture creation inside the document, or allow the user to make extensive modifications to the document set-up such as margins, columns, text orientation, and text wrap.

A desktop publishing package that is easy to use and offers a variety of helpful features can breathe new life into your business ventures. Designing your own business forms can save you money and time. Everything from simple memos to annual reports can be created with ease in the right DTP program. The top three Amiga DTP packages are *Professional Page*, *PageStream*, and *Saxon Publisher*.

Don't forget a structured drawing program or a paint program for those special graphics. Structured drawing programs make it easy to create simple graphics and figures, background fills, borders, and logos. paint programs offer the same opportunities but with a little more flair and the possibility of virtually unlimited color combinations. Creating your documents in-house will save you time and money.

Protection

Protect yourself and your Amiga with certain utilities. Backup utilities like *Quarterback* and *Rawcopy* copy, compress, and store data from hard drives and floppy disks. Regular backups of your hard drive should be made to keep all your stored information up-to-date. With backup, lost data can be quickly and easily restored which will save valuable time.

Virus protection is another important step to insure the safety of your electronic media. One wrong virus could wipe out your entire harddrive, or erase every floppy disk you insert in your drive. Viruses can be anything from a minor annoyance to a major disaster. Some merely cause your machine to beep from time to time; others will erase every bit of memory.

In case something disatrous does happen, it is good to have a disk repair kit on hand. Repair utilities such as *The Disk Mechanic*, *B.A.D.*, and *Quarterback* tools examine your disks and look for things such as fragmented blocks of memory, unreadable and unwritable blocks.

File conversion

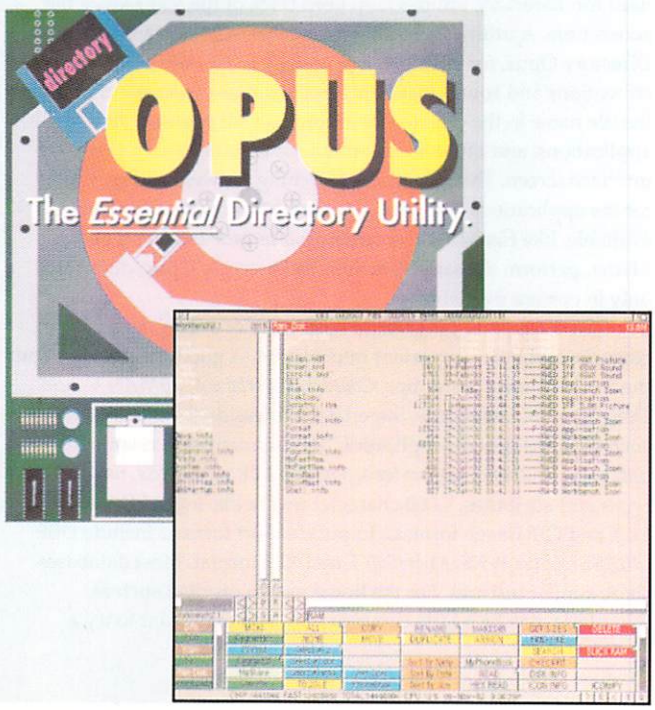
The Amiga is not the only computer platform out there. For times when our Amigas must interact with those machines on other platforms, we have available file conversions utilities, PC emulation software, and bridgeboards. The topic of bridgeboards is too extensive to explore here, but if you plan on doing a lot of cross-platform work or wish to take advantage of some of the software available for the IBM, then a bridgeboard may be worth looking into.

File conversion and manipulation software will widen the range of your Amiga's reach and greatly increase its potential. Cross-platform file converters help you to work well with others. *CrossDOS*, *MAC 2 DOS*, and *DOS 2 DOS* are some of the products available commercially. (DOS 2 DOS is now a standard feature of AmigaDOS 2.2 and 3.0) There are several conversion utilities available in the public domain or as shareweare. All of these

Organize: Directory Opus

Directory Opus from INOVAtronics is a leading directory utility for the Amiga. DOpus organizes your directories and files to your specifications. It is fully configurable to user specifications. It comes with numerous functions such as user-definable sorts and ARexx support. Other directory Opus features include AGA support, anim and anim brush playback, audio support, and support for all ILBM formats. Directory Opus will also run executables, display fonts, display text files, and launch CanDo decks. There are an unlimited number of user-configurable buttons and unlimited device buttons.

Directory utilities such as Directory Opus are designed to be used in place of the Workbench. DOpus can be configured to your needs. With the click of a button on the custom interface, you can view the contents of a certain directory, launch a program, or format a disk. It is simple to use and eliminates time consuming searching of directories and disk partitions for files.



programs allow you to bring text or picture files over to the Amiga from the other platforms and vice versa. There are some limitations, however. Disk capacity is one limitation. Some file types may not convert properly is another. Users will also experience problems converting 24-bit images. Often, an image will lose some of its quality when ported to another platform.

Image Manipulation

An image processing package is just as important as any other software you own. The uses for an image processor are countless. The Art Department Professional and ImageMaster are the two big names in this area. Both allow loading and saving of almost every file format available. They allow the user to change a file type, resize an image, view an image, or make changes to the image's palette and other physical changes. These are a must if your are working extensively with image files.

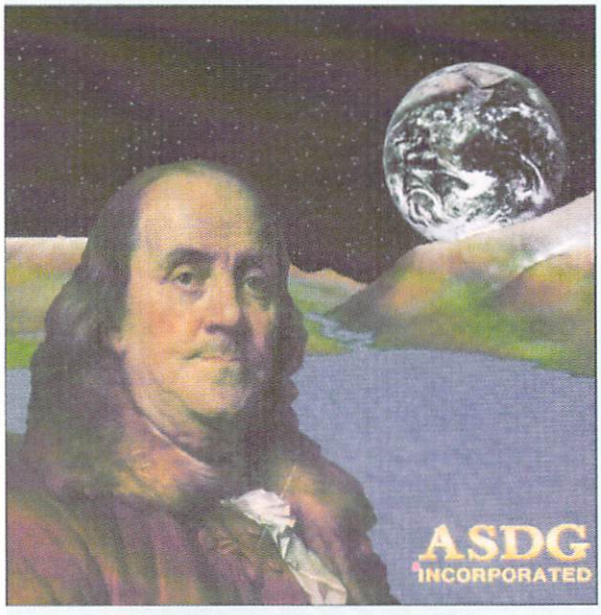
Optimize

Using an Amiga that is suited to your needs makes all the difference. A person doing 3-D, 24-bit rendering would not perform up to par on a stock A600. There is such a thing as too much power as well. If all you are using your Amiga for is word processing, then you don't need an A4000. Look at you choices carefully. There are at least a half dozen Amiga models on the market today and hundreds of different configurations available. Decide what you will be using the Amiga for before you invest in one.

If you are already an Amiga user, then perhaps you need to improve you Amiga. How do you know when to upgrade your present model? Examine the machine's present configuration and its work load. Can the Amiga's efficiency be improved? Chances are the answer to that question is yes. The lower-end Amigas—A500, A600, A1200—are not the fastest machines around. They do not come packed with memory either. The A600 lacks expansion possibilities at the moment. Perhaps in the near future developers will take full advantage of the PCMCIA slot for acceleration and expansion. The same goes for the A1200; however, these machines are very new and there has not been much time for extensive third-party hardware development. As for the A500, it is perhaps the most expandable low-cost Amiga. Accelerators, RAM expansion cards, hard drives, and more are available for this machine. The A2000 and A3000 also have a great deal of expansion capabilities. Extensive RAM and storage expansion, and a complete range of accelerator cards are offered for these machines, among other items.

Take the right path to upgrading your unit. Try to get the most for your money without going over budget. Good productivity also means keeping within your monetary limits. Obviously, the faster your machine is, the more efficient it will be. But you may not need all that speed. It is possible to have a machine that moves too fast for the work you give it. Again, if all you use your A2000 for is word processing, then there is no need for you to have a 68040 accelerator installed, maxed out with RAM. Setting yourself up with a lesser board will save you some money in the long run. Just be sure to choose one with expansion possibilities in case you want to go a little faster in the future. Companies such as GVP and Progressive Peripherals offer a wide variety of accelerators for the A500, A2000, and A3000. They are offered in different configurations and speeds.

If your Amiga is already accelerated, you may want to look into purchasing additional RAM. Most accelerator cards have RAM expansion slots on-board. A card may come configured with 4MB of RAM but be expandable to 8MB. Innovations with 16- and 32-bit RAM make it possible to go well over the 8MB mark on a compatible card. Additional RAM will improve the processing power of



The Art Department Professional is packed with a wide variety of features necessry for total image control. AdPro features JPEG image compression which can dramatically reduce the file size of 24-bit images. AdPro also features a frame editor for batch processing and animation tools, support for 8-bit HAM, and a universal loader which automatically detects and decodes most image file formats. Loaders and savers in AdPro allow you to load many different file formats and save them in just as many different ways. The JPEG support is vital. AdPro will open JPEG images and save them as another file type or take a 24-bit image and compress it.

AdPro's user interface is straight forward and easy to learn. It is loaded with different features which may take a while to master. The sheer power of the program makes the moderate learning curve well worth it.

Other features in AdPro include a roll operator for faster creation of video transitions and a broadcast limit operator to identify and correct colors which can cause playback artifacts. AdPro's versatility makes it play an important role in desktop video, publishing, and graphics processing and can surely boost the efficiency of image processing.

Boost Your Productivity!

your machine. Commands and background tasks will run quicker. Screens will refresh faster. Programs will load quicker and operate smoother and there will be a general increase in the quality of operation.

Perhaps your machine does need a complete overhaul. You've decided to move on from letter writing to video production and 3-D rendering. There are two paths to take for a total upgrade of your system. The first, purchase a more powerful model Amiga. The second, upgrade your present machine to the fullest.

An Amiga involved in video editing should be accelerated with a 68030 or 040. It should be upgraded to 2MB of chip RAM if it does not already have the memory. It should also have the maximum amount of Fast RAM installed. The unit should have a fairly large hard disk for ample storage room. To upgrade a stock Amiga 2000 along this line would cost around $4000, if not more.

G-Force 030 A2000 Combo 50MHz/4MB/68030	$1799
DKB MegAChip 2000/500 chip RAM expansion	$299.95
SupraDrive A2000 w/controller & autoboot 240MB	$999.95

Now for roughly the same price, you could pick up a brand new Amiga 4000 (MSRP $3699). Commodore's present Power Up Program, running until March 31, 1993, could put you into a new A4000, with a 120MB hard drive and 6MB RAM, the new AGA chip set, Art Department Professional AGA, and Deluxe Paint IV AGA for $2693! Not a bad price at all. You would have to upgrade your monitor to at least a Commodore 1950, but if you are going to be doing video production, you would want a better monitor anyway.

Not everyone has to go this route. You may just need more RAM or a larger hard drive to improve your productivity.

Input/Output

Proper input methods improve the quality of your work. Simple things like making sure your keyboard is functional and that your mouse clicks when it is supposed to will improve the speed and accuracy of your input. Graphics tablets will help the artists and animators get over the awkward feel of the mouse. Scanners and digitizers add to the different ways information can be input into your Amiga.

With scanners, quality is a big factor. Scanners "scan" documents at different levels of dots-per-inch. A scan done at 300 dot-per-inch will have a higher quality than a scan performed at 150 dots-per-inch. A good all-purpose scanner can scan color, black & white, and greyscale and should be able to scan at least as high as 300dpi.

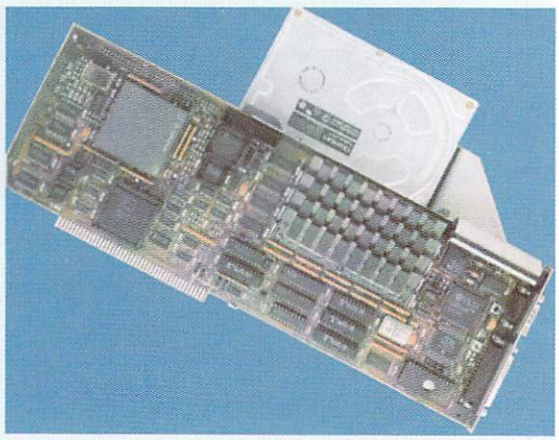
The fruit of your labors should come out looking fresh, clear, and professional. Don't let your efforts be spoiled by a substandard output device. Choose a printer that is right for the output you wish to create. Dot matrix printers suffice for things like mailing lists and general around-the-office jobs but hardly match up to the quality of a laser printer for finished work. Laser printing adds professional quality to your finished product. It is cleaner, sharper, and more efficient overall compared to dot matrix printing. A PostScript laser printer is more than a mere convenience since the Postscript language will allow you access to a wider range of fonts and will enhance the print quality of graphics and Encapsulated Postscript Files. Laser printers are available in many different configurations. Usually, a 300dpi printer with installed fonts and Postscript will suffice. Postscript laser printers are generally more expensive than regular laser printers.So if your budget does not allow for a Postscript laser printer at first, make sure the one you

Optimize: G-Force!

The G-Force line of accelerators from Great Valley Products bring speed and agility to the Amiga. The G-Force line includes 68040 accelerators for the A2000 and A3000 and a 68030 for the A2000. The G-Force 040 for the A2000 is available in 25- and 33MHz versions and comes with 4MB of 32-bit wide RAM installed and is expandable up to 16MB.

The G-Force 040 for the A3000 and A3000T includes a 68040 CPU running at 28MHz, MMU, FPU, and seperate 4K instruction caches.

Both G-Force boards for the A2000 are available in "Combo" packages. The G-Force 030 A2000 Combo features an optional kit for mounting a hard drive directly on the board and the accelerator runs at 50MHz. The G-Force 040 A2000 Combo includes a high performance SCSI controller, serial port, and parallel port.



A2000 G-FORCE 040 COMBO

A COMPLETE SYSTEM ON A SINGLE BOARD

purchase has the ability to be upgraded to Postscript in the future.

Quality output is not limited to black-and-white laser printers. Color printers, inkjet, thermal wax, and more, are also available. Their output quality is high and so is their price. Most laser printers, color or black-and-white, can make transparencies. For films and four-color separations, try using a service bureau.

Keep in mind that monitors are output too. A good monitor will give you a better idea of what your finished product will look like. Color multi-sync monitors give excellent output but are more expensive than a regular monitor. If you are an A500, A600, or A1200 owner, don't expect to get good quality from your television.

Educate

Do you really know what you are doing? Most of us think we have a total grasp of the Amiga programs we use daily and we probably come pretty close. The truth is, though, that there is a lot more we could learn about the software and hardware we use. There are several ways to improve our Amiga knowledge. Video tapes, books, and magazines are excellent resources. We musn't neglect the users manual that comes with our software. Many users tend to skip the manual and dive right into the program. Granted, there are some excellent software products out there that have very poor documentation, but even so, the manual is there as a means of support for the product and support for the user and it should be taken full advantage of. If the manual leaves you looking for more information, look for instructional videos, books, or magazines articles on the program.

New Amiga owners should definitely seek instruction, especially if they are coming from another platform. The Amiga Operating System is unlike any other operating system around today. The commands may be similar to those found in MS-DOS systems, but the overall operating system is uniquely different in the way it accesses files, performs functions, multitasks, and addresses other points. Informal instruction will make learning how to use the new machine much easier. Again, there are plenty of video tapes and instructional manuals available and many are focused toward the beginning Amiga user.

Practice makes perfect. The more you work with your machine and programs, the more experienced you will become. Don't be afraid to experiment. You may discover something that will boost your productivity even more.

Conclusions

Increased productivity is not limited to these four steps. Nor is it limited to the methods outlined in the steps. These are simply general ideas to help improve your productivity. In the future, we will focus on specific software and hardware products and provide suggestions as to how the efficiency of those products may be increased.

Remember, as a rule, if you are well organized, are working with the proper equipment, the equipment is in tip top shape, and you know how to use it, you will be very productive. In the future, AC will feature articles to help increase your productivity with specific products.

•AC•

Companies Mentioned

Directory Opus
INOVAtronics
8499 Greenville Ave, ste 209B
Dallas, TX 75231
Inquiry #241

Hard Disk Organizer
Display Systems International
147 West Main St.
Dayton, PA 16222
Inquiry #242

Quarterback
DOS-2-DOS
MAC-2-DOS
Central Coast Software
P.O. Box 164287
Austin, TX 78716
Inquiry #243

CrossDOS/CrossPC
Consultron
8959 Ridge Road
Plymouth, MI 48170
(313) 459-7271
Inquiry #244

Disk Master
Progressive Peripherals
938 Quail St.
Lakewood, CO 80215
(303) 238-5555
Inquiry #245

Conatet
Dist. by Consultron
P.O. Box 3053
Manuka, ACT 2603, Australia
Inquiry #246

Superbase 4
SBase Personal
Oxxi, Inc.
P.O. Box 90309
Lon Beach, CA 90809
(310) 427-1227
Inquiry #247

dBMAN V
VeraSoft Corporation
4340 Almaden Expressway
San Jose, CA 95118
(408) 723-9044
Inquiry #248

Designer Database
Software Visions
12625 La Tortola
San Diego, CA 92129
(619) 538-6263
Inquiry #249

Personal Information Manager
Unique Design Software
P.O. Box 641
Shirley, NY 11967
(516) 281-1530
Inquiry #250

Personal Video Librarian
Personal Database Applications
2616 Meadow Ridge Drive
Duluth, GA 30136
(404) 242-0887
Inquiry #251

Personal Finance manager
MichTron
3201 Drummond Plaza
Newark, DE 19711
(302) 454-7946
Inquiry #252

Secretary
Expert Services
5912 Centennial Circle
Florence, KY 41042
(606) 371-9690
Inquiry #253

Gold Disk Office
Gold Disk Works
Gold Disk, Inc.
5155 Spectrum Way, Unit 5
Mississagua, ONT, Canada
L4W 5A1
(416) 602-4000
Inquiry #254

The Disk Labeler
Software Technology Inc.
P.O. Box 22066
Portland, OR 97222
(503) 653-2090
Inquiry #255

The Art Department
Professional
ASDG, Inc.
925 Stewart St.
Madison, WI 53713
(608) 273-6585
Inquiry #256

Imagemaster
Black Belt Systems
398 Johnson Rd.
RR-1 Box 4272
Glasgow, MT 59230
(800) 852-6442
Inquiry #257

Great Valley Products
600 Clark Ave
King of Prussia, PA 19406
(215) 337-8770
Inquiry #258

ARexx

Last month, we looked at a way to make custom forms for your business with ARexx and PostScript. This month we will continue with a useful utility to print your business envelopes on your PostScript laser printer. It requires only input from a CLI or shell, and there is no need to open up a DTP or Word Processor. The program keeps an address data base similar to the one last month, so that you may call up commonly used addresses using a simple mnemonic name. A variation of this program is in *The ARexx Cookbook*, but this version (Disk I) allows you to address envelopes to Europe using accented and special characters. It also prints "Air Mail" on the envelope next to the address. We'll use ARexx to handle the data files, and the PostScript commands as well. Once ARexx's formidable string handling has constructed each ASCII PostScript command, we simply use the ARexx WRITELN() function to write one PostScript command line at a time to the PAR: device, which ARexx OPENs with option to Write like any other device. The PostScript interpreter inside the printer interprets these commands and prints the envelope.

Three Labels

Our program is in three parts characterized by three label statements, start:, Decide:, and printaddress:. The start: section allows us to get the address information either from the data base or from the shell input stream. We may give a mnemonic name to look up in the directory—mine is "data:wp/addresses", but you may easily change the code for your own path to your address directory. If the name is found in the address directory, then the program OPENs the file for reading (option 'R' of the OPEN function); if the file is not found, the control cycles back to the start and prints an error message. Note that we have an option of entering "L" at the prompt—none of your address mnemonics ought to be "L." If "L" is entered, then a directory listing is output so we can refresh our memories. If we simply press return at the first prompt, a second prompt allows us to enter the address directly, as we need to do the first time we use that address.

Useful Accessory Tools

I find two shareware programs called PopCLI and Snap to be essential here. PopCLI allows you to open a shell by pressing [Left-Amiga] and the [Esc] key together. I also use WShell by William Hawes, which has the option of opening a shell on *any* screen, public or private, via PopCLI. Snap lets you copy (snap) text *anywhere* in any screen and put it into the clipboard ready to paste *anywhere* you put the cursor in any other screen! You simply hold down the [Left-Amiga] key while you click-drag a box around the text you want snapped. To paste, simply put the cursor where you want the text and hold the [Left Amiga] key. Click the right mouse button and Snap inserts the text. So, I PopCLI a WShell on top of my letter screen in whatever word processor I'm using, snap the address off the letter, run the envelope print program in the shell, and at the second prompt, I copy the snapped text into the shell window. You tell the program you have finished the address by entering '@' on a line by itself. I

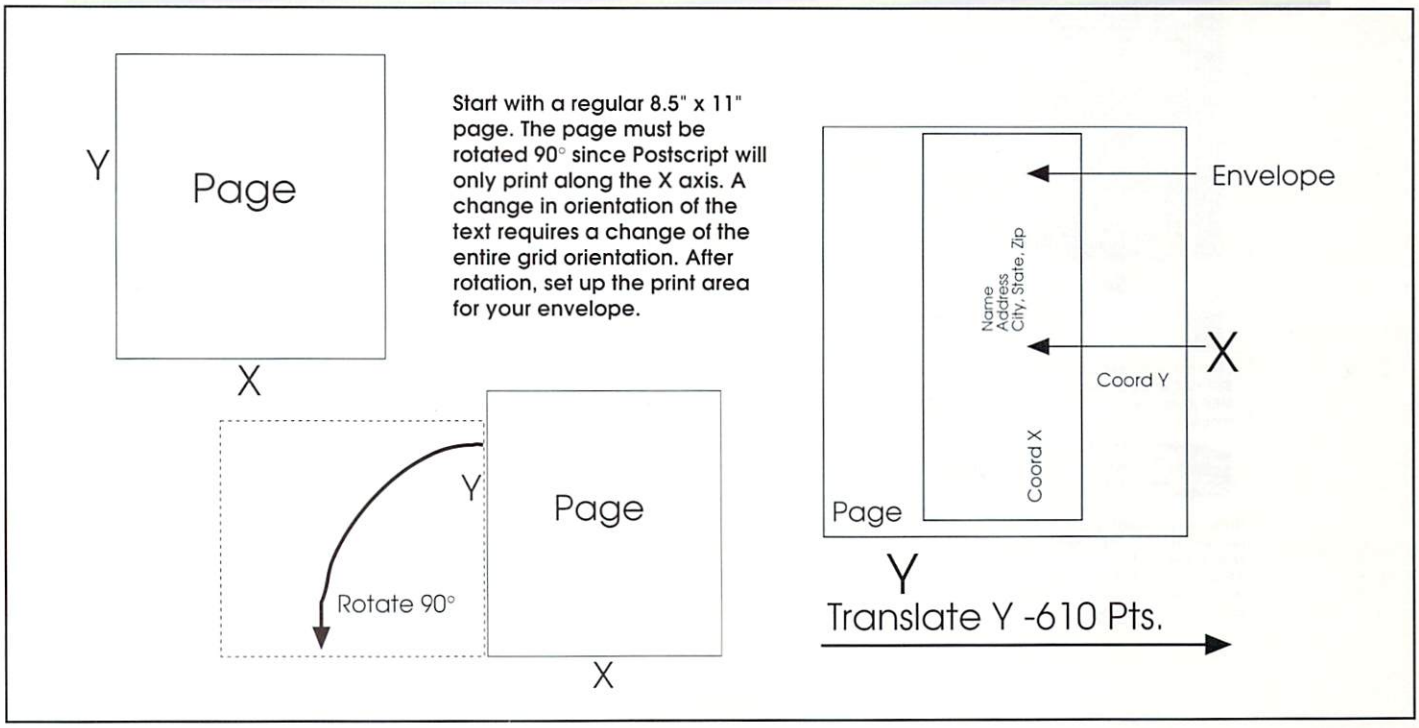
Use ARexx and PostScript to Address Envelopes

by Merrill Callaway

never have to type a new address but once! PopCLI and Snap may be downloaded from many BBSs, are included if you buy ARexx from William Hawes, and are also included on Disk I of *The ARexx Cookbook*.

Decide

The second section, Decide: allows us to make four choices—to only print the address on the envelope, to only save the address to our data base, to both print and save the address, or to quit the program. If we save or both print and save, the program prompts you for the save file, and OPENs the save file in the default directory cited above. Note the way the program is coded, that you may enter only a file name as the path is fixed. At the beginning of the program, a token designated print was set to 'no'. We use some logic to determine if we should print or not. We use a bit more than is necessary here to clarify the way things work. We could have condensed three lines into only one. Can you do it? If print ends up as a 'yes' then we CALL an internal function, the PROCEDURE printaddress:. Note that we need to EXPOSE k and line., the counter for the address lines and the entire array line.1, line.2, line.3, etc. What this means is that the entire address array and the count of its lines is available directly to our PROCEDURE. All tokens (variables) are protected by a PROCEDURE—they may have the same names as tokens in the main program, but the two sets of tokens will never affect each other at all. We must explicitly EXPOSE a token or tokens if we want to operate on them inside the PROCEDURE, and have the affects carry back to the main program, or if we want the values of the tokens to be taken into the PROCEDURE intact. One of the most powerful and remarkable conveniences of ARexx is the ability to carry an entire array implicitly into a PROCEDURE by only EXPOSING the counter and the stem token, as we do here. In case you're wondering, you cannot send an entire array implicitly to an EXTERIOR function. You may, however, pass up to 15 arguments to any exterior function in ARexx.



Audio Gallery

Talking Picture Dictionaries



Each ***Audio Gallery*** is a 7 or 8 disk set with 600 - 800 digitized words to build vocabulary in a foreign language. Various topics such as weather, living room. kitchen, numbers , etc. are presented in a fun graphical context. Each set includes grammar manual, quizzes and dictionary.

Chinese*	German	Korean*
English	Italian	Russian*
French	Japanese*	Spanish

$89.95, *$129.95

Digital Orchestra



IFF Sound Sample Libraries



One-Octave 8SVX IFF sound samples.
Instruments sampled at 17897 S/Second.
Sound Effects sampled at 8363 S/Seconds.
Compatible with DMCS, MED, Trackers, sequencers.
Digitized sounds professionally sampled.
Use MED to modify sounds, add echo, etc.

Instruments

SA01 Bass Guitars - Slap Bass, Fretless, Picked, etc.
SA02 Brass - Tuba, Trombone,Trumpet, French Horn, etc.
SA03 Reeds - Clarinet, Oboe, Saxophone, Bassoon, etc.
SA04 Strings - Violin, Viola, Cello, Orch Hits, etc.
SA05 Guitars - Acoustic, Electric, Lead, Jazz, etc.
SA06 Pianos - Pianos, Electric Piano, Honky-Tonk, etc.
SA07 Latin Percussion - Timbale, Conga, Bongo, etc.
SA08 Drums 1 - Bass Drum, Snare, Tom, Cowbell, etc.
SA09 Drums 2 - Hi-hat, Guiro, Agogo, Cymbal, etc.
SA10 Percussion - Steel Drum, Taiko, Bell, Woodblock, etc.
SA11 Organs - Cathedral, Electric, Bandoneon, Reed, etc.
SA12 Ethnic - Sitar, Koto, Bagpipe, Kokyu, Banjo, etc.
SA13 ChrPerc - Marimba, Xylophone, Celesta, etc.
SA14 Pipes - Flute, Piccolo, Recorder, Whistle, etc.
SA15 Ensemble - Orch Hit, Strings, Voice, Solo Choir, etc.
SA16 Choirs - Three or more harmonious singing voices.
SA17 Piano Chords - Major, Minor, 6th, 7th, 9th, etc.
SA18 Guitar Chords - Major, Minor, Min7th, 7th, etc.
SA19 Organ Chords - Church Organ and Electric Organ
SA20 Synthesized - Calliope, Square Wave, Saw Wave, etc.
SA31 More Chords - Acoordion, Honky-Tonk Piano
SA32 Organ2 Chords - Sounds of the Cathedral Organ
SA33 Voice Organ - Unique Voice + Elec Organ sounds
SA34 Harp - White keys, Black Keys, single tones.
SA35 SynthSounds - Fantasia, SpaceVox, Sweep, etc.
SA36 SynthSFX - Electric Cat, Ghost, Stratosphere, etc.
SA40 Foreign - "Hello", "Yes", "1,2,3", etc. in 8 languages

Sound Effects

SA21 Airplanes
SA22 Cars, Trucks
SA23 Nautical
SA24 Birds
SA25 Human
SA26 Wild Animals
SA27 Domesticated Animals
SA28 Trains
SA29 Military
SA30 Ghosts, Scary sounds

Each disk is priced at $5.95, 3 for $4.95 each, ten for $39.95, Complete collection for $99.95. Also available MED music construction kit and sampler. Send for free complete listing. Shipping $3, ten or more disks, $4.



FAIRBROTHERS, INC.
5054 South 22nd Street
Arlington, Virginia 22206
(703) 820-1954, Fax (703) 820-4779

Demo Disk for Audio Gallery (specify language) - $5 (rebate on product purchase). Free brochure available. Shipping $3, additional units $1 each. Add $4 for COD, UPS 2nd Day Air. Canada- $6 shipping, add 30% if paying in Canadian dollars. Canadian checks accepted. Overseas, add $8 shipping. Checks, money orders only. Most Institutional PO's accepted. Schools ask about low-cost multi-copy licensing arrangement.

Circle 113 on Reader Service card.

Print the Address

The last section, printaddress: is where ARexx constructs the final PostScript output to send to the PAR: device which connects to your printer. The PostScript interpreter is inside your laser printer, so as the ASCII strings generated by ARexx are copied to the parallel port, the PostScript interpreter takes them from there to print the page. Therefore only PostScript command strings should get copied to the PAR: device! You may change the name "PAR:" to something like "RAM:test" and then look at the ASCII file generated by the program. A typical output for a letter addressed to John Doe, 123 4th Street, Anytown, NM 87106, USA is shown by listing 2. Make sure to change the return address information to *your* address in the program code. Note the ISO Latin-1 encoding gobbledegook. I lifted this code directly out of *The PostScript Language Reference Manual*, Addison Wesley, page 275.

Changing the Encoding Vector

Briefly, an encoding vector is a table of octal numbers with their corresponding letter and symbol representations shown. The standard letters, A, B, C, etc., occur in standard places in different encoding vectors, but special characters such as accented letters may replace certain symbols, or occupy places in the table undefined in the "standard encoding". ISO Latin-1 is the encoding vector we must use to print accented letters common in Europe. The first part of the output listing is a PostScript program that does three things:

1. It makes a copy of the font dictionary including all entries, except the one whose name is FID (that's what the "ne" is for—not equal).

2. It installs the desired changes to the encoding vector. It replaces the font's "Encoding" with the value of "ISOLatin1Encoding" which is a built-in, 256-element array of character names defined in "systemdict", (internal to the PostScript interpreter; systemdict contains important data and definitions).

3. It registers this modified font under some new name, as in our example Helvetica-ISOLatin1. Now "normal" letters will print with no difference, but accented letters as used in European languages will print as well. If the screen displays the accented letter correctly, then it will print correctly (for instance *WordPerfect* special characters). You may also enter special characters with their octal code, but you will need to have an ISO Latin-1 encoding table to refer to (Appendix E in the above cited text). Embed \ddd in the text where ddd is the octal representation of the character. The backslash "escapes" the character and tells PostScript to expect a character code literal.

As we have pointed out in previous columns, PostScript interprets via a LIFO or Last In First Out stack. The code is tricky to read, as the commands seem "backwards," and nested brackets make it all the more difficult to understand. ARexx makes it easy, however, to lift a gnarly little PostScript program like this and use it directly!

Landscape Printing on Envelopes

The second tricky thing about the PostScript side of things is the orientation of the envelope in the printer. PostScript defines the page with a right-hand grid of X and Y with origin at the lower left-

(continued on page 62)

GoldenGate 386SX

Bridge Over Troubled Waters..

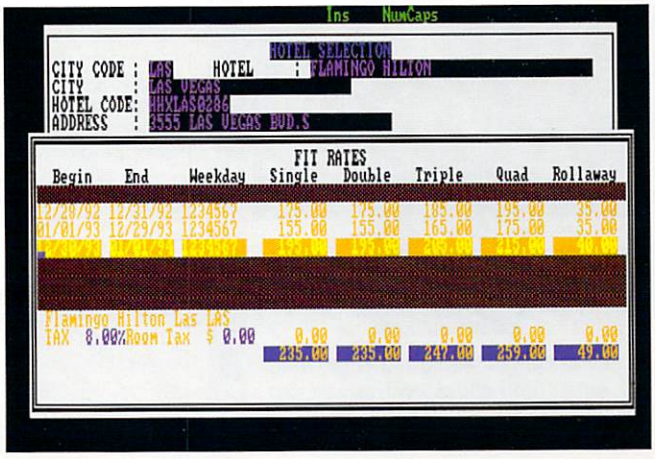
by Dietmar Postl

"Golden Gate" is not only the name of the famous bridge which connects San Francisco with the Northern bay region, but also the name of a new device for the Amiga. The GoldenGate board is manufactured by Vortex in Germany and promises to bridge the gap between our trusty AmigaDOS and the realms of MS-DOS. Unlike previous products from Vortex (ATonce, ATonce plus), the GoldenGate is a "real" bridgeboard for all flavors of the A2000, A3000 and A4000, and connects the Amiga's Zorro slots with the PC/AT compatible ISA slots. It comes with two processor options: either a 386SX or a 486SLC, both running at 25MHz. I have tested only the 386SX version. At first sight, it may look just like a clone of Commodore's new 386SX bridgeboard, but don't be fooled—as one of the most versatile boards for the Amiga, the GoldenGate is up to more than that.

The board comes with 512KB RAM preinstalled and allows you to add up to 16MB, using IBM-standard SIMM modules. In the minimum configuration, 640KB are available to MS-DOS on a stock A2000. If you have additional memory in your Amiga, up to 80 percent of it can be used by GoldenGate and made available to MS-DOS as extended memory. The board can access Amiga harddisks and floppy drives. An IDE harddisk controller is integrated on the board, an optional floppy-controller chip enables you to connect up to three standard MS-DOS floppy drives to the GoldenGate, and a math coprocessor socket and a speaker are also integrated on the board. Without a video card in one of the Amiga's PC/AT ISA slots, the following video modes are emulated on a regular Amiga screen: CGA text and graphics in 16 colors; Toshiba 3100, Olivetti, EGA and VGA monochrome graphics, and MDA/Herkules monochrome display.

Apparently, the designers at Vortex were not satisfied to make just another bridgeboard, but let their ingenuity go a little further. Using the supplied server program, 2- or 4MB of additional RAM installed on the GoldenGate can be made available as memory expansion for the Amiga. In addition, a partition of an IDE harddrive and also up to two floppy drives connected to the board can be used for the Amiga Although you will not be able to use 880K formatted disks, your Amiga will be able to read and write these disks in 720K, 1.4M and 2.8M formats.

Hardware installation is fairly easy and straightforward, and you have only to follow the detailed instructions and illustrations in the manual. On the A2000, you first disconnect all cables, open the chassis, remove the metal bracket on the back of one of the two bridgeboard slots, pop the card in place and secure its back bracket with one screw. My test board was just a fraction of an inch too large for my chassis, and I had to push and wiggle a little before it was secured in its place, and the back bracket is almost a little too high. Only on the A2000 do you also have to insert an adapter socket between the 68000 processor and the motherboard, first requiring you to remove the supporting frame that holds the power supply and floppy drive, and then the 68000 CPU itself; the adapter socket is not required on the A3000. If you follow the clear instructions and illustrations, you should not have any problems, and the whole procedure took me approximately 20



The Best-Selling 24-Bit Amiga Solution

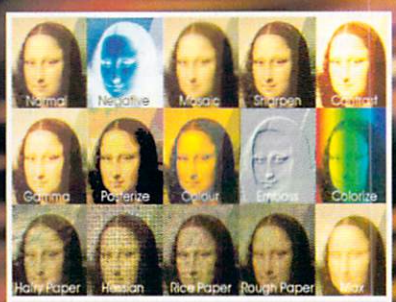
OpalVision™

Seeing is Believing





OpalPaint's new Chrominance Effects allows absolute, real-time control of image contrast, brilliance and re- mapping of colors.



OpalPaint's image processing modes will alter any area or an entire image. More than a paint program, OpalPaint is a complete creative environment.



OPALPAINT's exclusive real-world Artist's Tools and paper types bring a new level of artistic creativity to the Amiga.

The Reviews Are In. The Critics Agree:
OpalVision Sets A New Standard of Excellence.

"Without question, the OpalPaint software is the finest, most versatile, and endlessly customizable paint package on the Amiga platform"
—TV Technology

"OpalPaint is the overall champion of Amiga paint programs"
—Desktop Video World, USA

"One of the hottest new Amiga display boards. OpalPaint includes state-of-the-art features not found on any other Amiga paint program."
—Amiga World, USA

"Quite simply, it's a spectacular product."
—Amiga Computing Magazine, UK

"Undoubtedly the finest, most professional paint program to arrive on the Amiga."
—Amiga Format Magazine,UK

"OpalVision is awesome!"
—Camcorder Magazine,USA

"Professional quality at this price can't be turned away."
—Amiga User International Magazine,UK

"OpalVision is an amazing delight."
—Hank Tucker, Producer for Disney TV Animation, USA

"The verdict was unanimous — brilliant."
—Amiga Shopper Magazine, UK

"OpalPaint is in my opinion the best paint program currently available in the United States for the Amiga."
—The Amiga Video Journal (AVID), USA

The OpalVision Main Board

A true 24-Bit frame buffer and display device with 16.8 million colors available for every pixel with a maximum resolution of 768 x 480 (580 PAL). An internal card, it operates automatically in NTSC or PAL mode in any Amiga computer with a video slot including the Amiga 4000. It's powerful VLSI graphics coprocessor enables stencil modes, a host of transition effects and smooth, hardware-controlled priority switching and scrolling/panning effects. The board's "Palette-Mapped" design updates screen colors in real-time for fading pictures in and out and changing their palettes on the fly. Every Main Board includes OpalPaint, OpalAnimMATE and Opal Presents! software.

OpalPaint *New! Version 2.0*

OpalPaint even in its first release was widely praised as the very best paint program on the Amiga. Reviewers have compared it favorably with the very best painting systems on the Mac and PC. Some even say it rivals professional broadcast systems costing $70,000.00! And now we've added even more powerful features:

Real-time chrominance effects. Interactively modify RGB response curves. Re-map an image's colors, change its brilliance or contrast in real time. You've got to see it to believe it. *AREXX control.* OpalPaint now includes the most powerful implementation of AREXX ever in an Amiga paint program. Unleash all of OpalPaint's 24-Bit image processing power from any program which supports AREXX. *The Magic Wand.* A real time-saver. Easily and quickly select specific ranges of colors interactively. Working with 24-Bit true-color has never been this simple! And that's not all. We've added *overscan painting, custom papertypes, real-time previews* of many image processing modes, and more!

OpalPaint is Fast. Real-time. Full 24-Bit. It gives you complete control over OpalVision's 16.8 million color palette. Includes a full-range of drawing tools and an expandable library of image-processing modes with adjustable parameters, complete texture-mapping capabilities, transparency and color gradients, multiple work modes, nozzle brushes and pre-defined palettes. Real-world "Artist's Tools" and customizable paper types, multiple stencil types and compatibility with the pressure-sensitive Wacom drawing tablet provide a level of support for artistic creativity never before available on the Amiga.

OpalAnimMATE *New Version! Now even faster!*

Run OpalVision animations at rates of up to 60 frames per second. It's features include 8, 12, 15, 18 and 24-Bit modes with selectable screen sizes from 32 x 20 to 768 x 286 pixels and will play anims directly from hard drive. Delta compression creates small files and fast playback rates. Create 16-million color animations using your favorite 3D rendering package and play them back through OpalVision!

The OpalVision Main Board is the core of a complete video system.

Enhancement Modules Coming Soon:

Frame Grabber + Genlock Module

24-Bit real-time framegrabbing and better-than-broadcast-quality genlocking. Real-Time video effects, transitions and color processing.

Quad-input Production Switcher

Complete video switching capabilities. Includes S-VHS, composite and RGB inputs and outputs. Combine live video sources, OpalVision and Amiga graphics.

OpalVision Scan-Rate Converter

For flicker-free 24-Bit and Amiga graphics. Also acts as a separate 24-Bit frame store.

OpalVision Roaster Chip

Complex DVEs. Real-time processing of live video. Picture-in-Picture capability. Includes pre-made effects and provides for the creation of custom effects.

Free Imagine 2.0
A $450.00 Value



Buy an OpalVision Main Board and get a FREE copy of Imagine 2.0 for OpalVision!

ACT NOW! LIMITED TIME OFFER!

Imagine 3D - the most popular, best-selling Amiga 3D rendering software now supports OpalVision! And you can get a free copy (a $450.00 retail value!) if you purchase an OpalVision Main Board. This isn't a stripped-down, crippled version. This is a full version of the most powerful, award-winning 3D renderer, Imagine 2.0, now with full OpalVision compatability!

Here's how it works: Purchase an OpalVision Main Board between February 1 and March 31, 1993. Send us a copy of the invoice with your name and address along with your OpalVision Warranty card and we'll send you a free copy of Imagine! U.S.A. orders include free shipping. Orders from outside the U.S.A. please include a $20.00 shipping and handling fee. Please enclose an international money order or furnish your Visa, MasterCard or American Express Card number and expiration date. Requests for Imagine and purchase documentation must be received by April 30, 1993.)

Third Party OpalVision Software
(Available now or coming soon!)

Aladdin 4D, AmiLink Video Editing Products, Art Department Professional, Caligari 24, Cine Morph, Fractel Pro, Image FX, ImageMaster, Imagine, Michtron Entertainment Products, Morph Plus, Real 3D, Scala InfoChannel, Scala MultiMedia 200, Texture City Image Libraries, 3D Professional, Transporter, TV Paint, Vista Pro, Video Visions and more!

OpalVision Distributors

Canada: **B.M.D.**, Woodstock, Ontario Ph:(519) 539-0200 Fax:(519) 539-9725
Denmark: **Scala Computer TV**, Herlev Ph:44 53 11 77 Fax:44 53 11 73
France: **CIS**, Pessac Ph:56 36 34 41 Fax:56 36 28 46
Germany: **VideoComp**, Overursel Ph:61 71 59 070 Fax:61 71 59 07 44
Italy: **KB srl**, Bologna Ph:51 76 55 63 Fax:51 76 55 68
Japan: c/o **Omni Int'l**, Seattle, WA Ph:(206) 628-2925 fax: (206) 628-4324
Netherlands: **Take One Prods.**, Heerlen Ph:45 22 57 83 Fax:45 21 22 63
Norway: **Capella**, Oslo Ph: 222 00 806 Fax:222 00 805
Portugal: **Chroma**, Coimbra Ph:351 39 273 43 Fax:351 39 27 401
Spain: **Arkofoto**, Barcelona Ph:33 01 00 20 Fax:33 18 02 77
Sweden: **Karlberg & Karlberg**, Bjarred Ph:46 47 450 Fax:46 47 120
UK: **ZCL**, Lichfield, Staffs., Ph:54 34 14 817 Fax:54 32 50 713
USA: **American Software**, Illinois Ph:(217) 384-2050 Fax:(217) 384-2055
USA: **MicroPACE**, Illinois Ph: (217) 356-1884 Fax:(217) 356-0097
USA: **Vertical**, Texas Ph:(214) 466-0048 Fax:(214) 466-0428



OpalAnimMATE offers real-time playback of animations created by ray-tracers, landscape generators, morphers and all other 24-Bit software.



The powerful new Magic Wand in OpalPaint lets you easily and interactively select specific ranges of color.



The new Alpha Channel feature of OpalPaint allows photo compositing with selectable transparency levels on a pixel-by-pixel basis.

Created by:
Opal Tech
Sydney, Australia

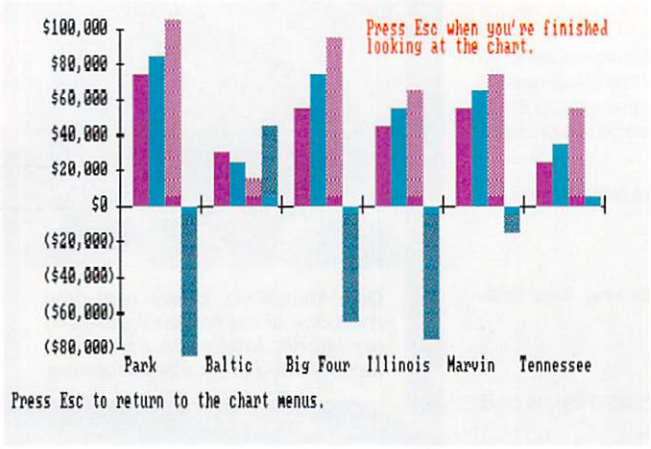
Manufactured and Distributed by:
Centaur Development
P.O. Box 4400
Redondo Beach, CA 90278

Phone: (310) 542-2226
FAX: (310) 542-9998
BBS: (310) 793-7142

For information:
1-800-621-2202

OpalVision, OpalPaint, Opal Presents and OpalVision Roaster Chip are trademarks of Opal Technology, Ltd. King of Karate and OpalAnimMATE are trademarks of Centaur Development, Inc.
Other brands and product names are trademarks or registered trademarks of their respective holders.

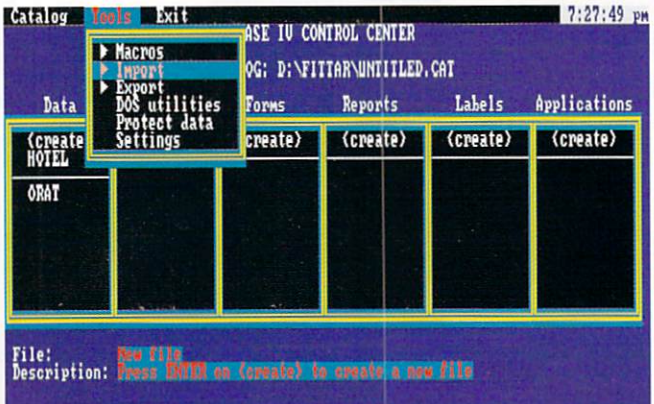
Circle 147 on Reader Service card.



The Golden Gate 386SX will transform your Amiga into a fully functional 386SX MS-DOS machine.

minutes. You have to be cautious, however: the CMOS components on the GoldenGate board are extremely sensitive to static electricity, and Vortex recommends you wear grounded wristbands and tools and work on an antistatic mat. Generally, if you can avoid working on a carpeted area, and if you touch the computer chassis before and while you work, you should be safe.

Before you start with your software installation, you should give your future system configuration some thought. If you want to run MS-DOS from a harddisk, you have three options. You can use an IDE hard drive connected to the GoldenGate's on-board interface, or a complete partition of your Amiga harddisk. In addition to this, the software will also let you use a large file on any

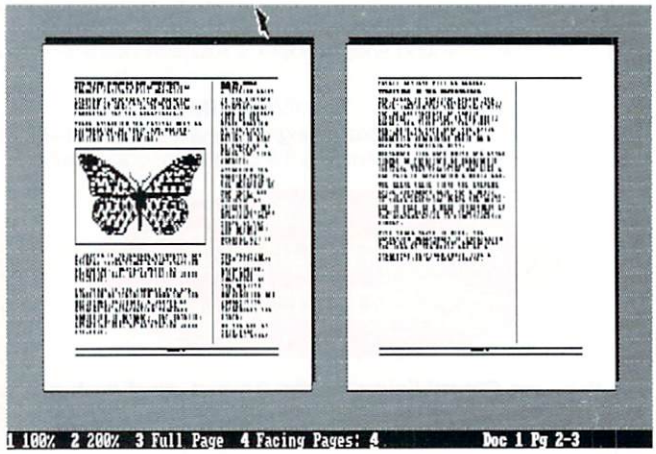


Amiga harddisk to simulate an MS-DOS partition—in this case, you do not have to sign over an entire partition to MS-DOS, but you will have to pay for this convenience with reduced access speed.

The software installation is also straightforward. If you boot from the supplied "Goldmine I" disk, you have the opportunity to go through the readme file with latest changes. Clicking on the HD-INSTALL icon invokes the installation routine that creates your new GoldenGate drawer on the harddisk and copies all necessary files. According to Vortex, some versions of FFS do not work properly, and for this reason you will find a working copy of FFS in the DEVS drawer on "Goldmine I." After installation, you can start the setup program by doubleclicking on its icon, and change the default settings. This setup program can also be invoked each time you start the emulator by pressing "S" during the system test. It gives you

options to configure your memory, floppy and harddisks, video modes and more.

The first time you run GoldenGate you have to boot MS-DOS from floppy and prepare the MS-DOS harddisk or partition using MS-DOS "FDISK" and "FORMAT" commands. Unlike Commodore's bridgeboard, MS-DOS is not included; you should be able to get the latest version (5.0) of MS-DOS for no more than $90 at your local computer store or through mail order. I personally prefer DR-DOS 6.0, which, at roughly the same price, offers many features and utilities (such as disk compression, disk cache, memory



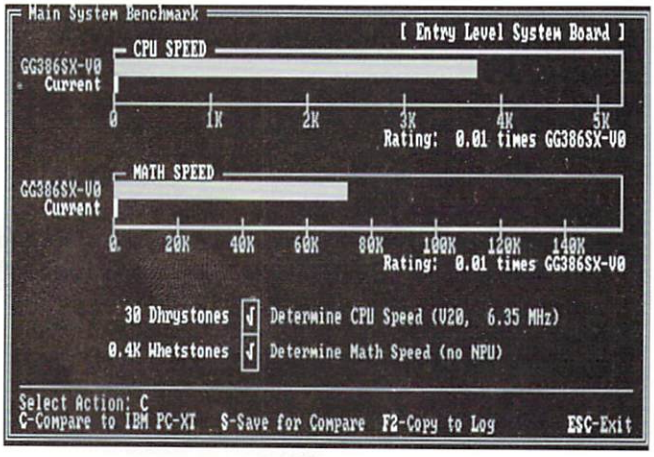
management and more) which you otherwise would have to buy separately. I have tested both MS-DOS 5.0 and DR-DOS 6.0, and both worked fine.

After the harddisk is prepared, you need to install the MS-DOS system files. If you use DR-DOS, a convenient install procedure will walk you through all steps and also assist you to customize your system. When you have finished installation, you will have to reboot the board and change the boot device in GoldenGate's setup program from floppy to harddisk. Now copy the utility programs from the "Goldmine II" disk (in MS-DOS format) onto your MS-DOS harddisk. This disk contains programs to change the display modes when you use the Amiga display, and also two utilities to copy files from your MS-DOS harddisk or floppy to any Amiga device and vice versa. Unfortunately, the file transfer utilities are as inflexible as their Commodore counterparts; they do not allow wildcards and you have to specify both source and destination with full path name.

The Amiga mouse is emulated as Microsoft compatible mouse on COM1, the Amiga printer and serial interface are available as LPT1 and COM2. GoldenGate does not include a mouse driver, but compatible mouse drivers are available with most software packages. The keyboard is emulated as a 84-key AT-style keyboard; the numeric keyboard block is available, and also the "Print Screen" works ("Shift *" on the numeric block). <Left Amiga><N> and <Left Amiga><M> let you switch between the GoldenGate and Amiga display and enable you to multitask MS-DOS and Amiga applications. While GoldenGate is running, Amiga programs do not exhibit any slowdown. This multitasking ability also makes it a snap to capture the screens of MS-DOS applications, using a utility such as *screenX*.

It is no big surprise, however, that the GoldenGate shows the same sluggish screen updates as so many previous MS-DOS emulators when the Amiga display is used. Depending on the video mode, scrolling and screen updates can be very slow in text mode and even slower in graphics mode. Screen fills are extremely slow. In monochrome text mode, the scrolling is just a little slower than on a standard Amiga. The more colors you add, the slower it gets. In CGA 16-color mode, you can wait a couple of seconds for a small directory listing. Slow video has been one of the major complaints with all MS-DOS emulators so far, and the explanation is quite simple. The Amiga has to emulate the function of a video adapter, and this just demands a lot of graphics processing power. To the GoldenGate's and Amiga's defense I must say that both the popular map program *Automap*, and the screen preview mode of *WordPerfect 5.1*, were almost as fast—or slow—on a stock A2000 as on an EGA card equipped 12MHz 286AT.

Of course, video is just one part of the overall performance. How does the GoldenGate perform in all other disciplines? Before we go on, you should be aware of the fact that we are talking about a complex piece of equipment which is able to use different kinds of resources with a different performance index. If you run the GoldenGate with only 512K factory-installed memory on an A2000, the software maps the BIOS, which is MS-DOS counterpart to the Amiga's Kickstart, into Amiga RAM, which is very slow for the 25MHz 386SX processor and induces a lot of wait states; as a result, all basic I/O functions like disk access, video, etc., will suffer. Similarly, if you use Amiga RAM as MS-DOS extended memory, this memory can be accessed only at a slow speed. If you add memory to the GoldenGate board, you should use 60ns SIMM chips which enable the board to operate with no wait states. In addition, if



you have at least 1MB on board RAM, you can map the BIOS into the fast GoldenGate RAM instead of using the much slower Amiga RAM. This speeds up virtually the entire system, especially the video performance and harddisk access times. Adding an accelerator board on your Amiga will also lead to a slight improvement of video and disk transfer speed.

In order to gain a better picture of the GoldenGate's performance, I ran several test programs and compared the results to those obtained on a "normal" 25MHz 386SX machine. I used the popular MS-DOS test program *CHECKIT*, Norton Utilities CPU-benchmarks and PC-Magazines *PCBENCH* V7.0. Without any additional on-board RAM, the GoldenGate's performance was slow compared to the other system. When I upgraded with 8MB memory, mapped the BIOS into the fast on-board RAM and used the other system's IDE harddrive and VGA card, the Vortex board showed similar performance and proved even superior in some aspects. Some memory tests of PCBENCH and the harddisk test of Norton Utilities crashed my system and I have yet to find out why. Otherwise, the GoldenGate performed stably and I did not run into any compatibility problems with application software such as *WordPerfect*, *Microsoft Works*, *DBase* and a couple of others, though I did not test any games.

Summing it up, the GoldenGate board is a very versatile and expandable emulator. If you pop a VGA card into one of the ISA slots, use a fast IDE hard drive and local floppy drives, you will have an MS-DOS compatible system with competitive performance. VGA cards are available from $60 and up, and an accelerated 16 million-color Super-VGA card will run for about $150. The crux is that you will need either a flicker fixer or one of the very few multisync monitors which can cope with both Amiga and SVGA display modes. To avoid using two monitors, Vortex developed a monitor-switchbox. It connects one monitor to both your Amiga (or flickerFixer) videoport and a VGA card. With a keyboard shortcut or a mouseclick, you can switch between MS-DOS and Amiga display. I have not tried to run *Windows*.

Vortex has opened a GoldenGate to many interesting—and inexpensive—devices which exist on the market for IBM compatibles. The bitter pill is that you will not be able to access a CD-ROM or other add-ons from the Amiga side of the system. If you are concerned that your A2000 has only one 16-bit and two 8-bit ISA slots, you should know that it is quite easy to upgrade the 8-bit slots to 16-bit standard—consult your local Amiga repair shop.

As mentioned above, the GoldenGate is also available with a 486SLC, which will boost performance by a factor of approximately 2.4. The 486SLC understands the machine language instruction set of the 486 and has an on-chip 1K cache, but uses only the 16-bit external bus like the 286 and 386SX. Regrettably enough, although the 386SX and 486SLC chips are pin compatible, a user upgrade is not possible since the processor is not socketed but soldered onto the board. Rumor has is that Cyrix, the maker of the 486SLC, is planning a "piggyback" 486SLC upgrade option for soldered 386SX chips. Whether this will be an option, we still have to see.

Should you buy it? At a price similar to, or less than Commodore's 386SX board, the expansion capabilities of the GoldenGate appear to make it a winner. With a street price of under $600 it is reasonably priced, although still expensive considering that you could get a 386SX with 2MB, harddrive, and video card for roughly the same amount. If you want to run MS-DOS software and do not want to put your Amiga in the other corner, GoldenGate could be something for you.

•AC•

vortex Computersysteme
Dist. by MicroPace Distributors
604 North Country Fair Drive
Champaign, IL 61821
(217) 356-1884
Inquiry 227

Please Write to:
Dietmar Postl
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140



MOVING?

SUBSCRIPTION PROBLEMS?

Please don't forget to let us know. If you are having a problem with your subscription or if you are planning to move, please write to:

Amazing Computing Subscription Questions
PiM Publications, Inc.
P.O. Box 2140
Fall River, MA 02722

Please remember, we cannot mail your magazine if we do not know where you are.

Please allow four to six weeks for processing

—ARexx *continued from page 56*

hand corner of the paper (portrait view). On a typical 8.5 X 11 sheet, imagine your right hand as a "pistol" with thumb and forefinger at right angles and their joining as the origin. Place the origin on the lower left corner of the page with the thumb along the lower 8.5-inch side and your finger along the left 11-inch edge. The thumb is X and the finger is Y, pointing in the positive direction. Now PostScript always prints a line of type in the X direction. In order to print type at some other orientation, PostScript requires us to change the grid system itself. In order to print landscape to match the lengthwise orientation of an envelope, we will need first to rotate 90 degrees and translate the grid minus 610 points (1 point = 1/72 of an inch) (-610/72 = -8.5 inches), so that the origin is at the lower right-hand corner, and thumb X is pointing *up* the page and finger Y is pointing toward the left. The other thing to keep in mind is that the printer thinks that an entire 8.5 X 11 sheet of paper is going through when only an envelope is there. We need to be careful to measure dimensions carefully. The simplest way to determine the correct dimensions with the envelope you choose is to lay the envelope along the center of an 8.5 X 11 page lengthwise, and measure in inches where you want the text to start. Then multiply by 72 to get how many Points your measure is. That's where my figures of X=410 and Y=300 came from for the address and X=135, Y=418 for the return address. *You should verify your own envelope.* You can damage the print drum if you should print outside the area of the paper on it! The best way is to try the program a few times on a full sheet of paper and hold up an envelope centered on it to see if the print area is acceptable.

I keep several different versions of this program at hand, one for business, and one for personal mail with different return addresses. You could also modify the program to prompt for the proper return address or for special messages like "Air Mail." You may also want to modify it to print different envelopes with different fonts or even to prompt you for the fonts to use. I hope you will find you use your envelope printer every time you send a letter, and will appreciate its easy use and the fact that you don't need to open up a DTP program to simply print an envelope!

Listing One

```
/* E.Rexx Envelope PS Printer */
start:
print='no'
savefile=''
SAY 'Start: Enter filename. [Rtn]=Enter address. Q=Quit. L=List Addresses.'
PARSE UPPER PULL input
IF input == 'Q' THEN EXIT 0
IF input == 'L' THEN DO
   ADDRESS COMMAND 'DIR data:wp/addresses'
   SIGNAL start
   END
k=1
IF input == '' THEN DO
   SAY 'Enter address: line 1 [Rtn], line 2 [Rtn], etc. ''''@ when finished.'
   DO FOREVER
      PARSE PULL line.k
      IF line.k='@' THEN DO;line.k='';SIGNAL Decide;END
      k=k+1
      END /* FOREVER */
   k=k-1
   END /* input==''*/

IF input ~= '' THEN DO
  IF OPEN('file','data:wp/addresses/'input,'R') THEN DO
      l=1
      DO WHILE ~EOF('file')
         line.l=READLN('file')
         SAY line.l
         l=l+1
         END /* DO WHILE */
      k=l-1
      CALL CLOSE('file')
      END /* IF OPEN */
      ELSE DO
         SAY 'Could not open your address file. Try again.'
         SIGNAL start
         END /* ELSE */
   END /* input ~='' */


Decide:
SAY '[P]=print; [S]=save to file; [B]=do both. [Q]=quit.'
PARSE UPPER PULL answer
IF answer == 'Q' THEN EXIT 0
IF answer == 'S' | answer == 'B' THEN DO
   SAY 'Enter filename. Default path is Data:WP/addresses/'
   PARSE PULL savefile
   savefile = 'Data:WP/addresses/'savefile
   IF OPEN('outfile',savefile,'W') THEN SAY 'Saving 'savefile
   DO n=1 TO k-1
      CALL WRITELN('outfile',line.n)
      END /* DO */
   END /* S  | B */
IF answer == 'P' | answer == 'B' THEN print='yes'
IF print= 'yes' THEN CALL printaddress(k,line.)
CALL CLOSE('outfile')
SIGNAL start
EXIT 0

printaddress: PROCEDURE EXPOSE k line.

/* postscript commands and parameters */
```

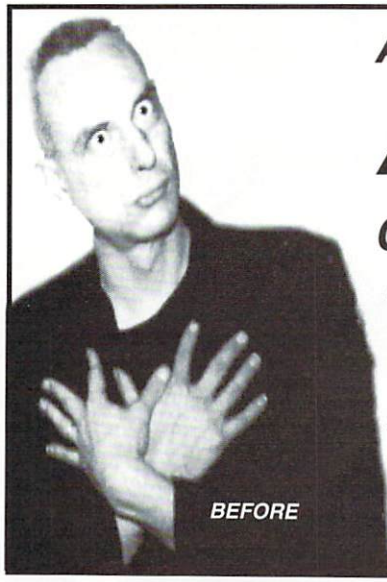
```
font='/NewCenturySchlbk-ISOLatin1 findfont 12 scalefont setfont'
coordx=410                                  /* left margin          */
coordy=300                                  /* top margin           */
pscommand='moveto show'
pshow='showpage'
tran='0 -612 translate'
rotate='90 rotate'
IF OPEN('output','PAR:','W') THEN DO
   SAY 'PRINTING...'
   /* re-encode to ISOLatin vector */
  CALL WRITELN('output','/NewCenturySchlbk-Roman findfont')
   CALL WRITELN('output','dup length dict begin')
   CALL WRITELN('output','{1 index /FID ne {def} {pop pop} ifelse}forall')
   CALL WRITELN('output','/Encoding ISOLatin1Encoding def')
   CALL WRITELN('output','currentdict')
   CALL WRITELN('output','end')
   CALL WRITELN('output','/NewCenturySchlbk-ISOLatin1 exch definefont pop')
   /* end of re-encoding vector */
   CALL WRITELN('output',font rotate tran)
   DO i=1 TO k
      CALL WRITELN('output','('line.i')')
      CALL WRITELN('output',coordx coordy pscommand)
      coordy=coordy-12
      END
   coordx=135
   coordy=418
   CALL WRITELN('output','(Merrill Callaway)')
   CALL WRITELN('output', coordx coordy pscommand)
   coordy=coordy-12
   CALL WRITELN('output','(WHITESTONE)')
   CALL WRITELN('output', coordx coordy pscommand)
   coordy=coordy-12
   CALL WRITELN('output','(511-A Girard Blvd. SE)')
   CALL WRITELN('output', coordx coordy pscommand)
   coordy=coordy-12
   CALL WRITELN('output','(Albuquerque, NM 87106)')
   CALL WRITELN('output', coordx coordy pscommand)
   coordy=coordy-12
   CALL WRITELN('output','(USA)')
   CALL WRITELN('output', coordx coordy pscommand)
   coordy=coordy-12
   font='/Helvetica-Narrow-Bold findfont 30 scalefont setfont'
   CALL WRITELN('output',font)
   coordx=175
   coordy=275
   CALL WRITELN('output','(AIR MAIL)')
   CALL WRITELN('output', coordx coordy pscommand)
   CALL WRITELN('output',pshow)
   END
CALL CLOSE('output')
RETURN
```

Listing Two

```
/NewCenturySchlbk-Roman findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse}forall
/Encoding ISOLatin1Encoding def
currentdict
end
/NewCenturySchlbk-ISOLatin1 exch definefont pop
/NewCenturySchlbk-ISOLatin1 findfont 12 scalefont setfont 90 rotate 0 -612
translate
(John Doe)
410 300 moveto show
(123 4th Street)
410 288 moveto show
(Anytown, NM 87106)
410 276 moveto show
(USA)
410 264 moveto show
()
410 252 moveto show
(Merrill Callaway)
135 418 moveto show
(WHITESTONE)
135 406 moveto show
(511-A Girard Blvd. SE)
135 394 moveto show
(Albuquerque, NM 87106)
135 382 moveto show
(USA)
135 370 moveto show
/Helvetica-Narrow-Bold findfont 30 scalefont setfont
(AIR MAIL)
175 275 moveto show
showpage
```

•AC•

Please Write to:
Merrill Callaway
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140



Are you suffering from

*ARexx Nervousa?**

Cure it with...

The ARexx Cookbook



Published by WHITESTONE

511-A Girard SE, Albuquerque, NM 87106 (505) 268-0678

* *The five deadly signs of ARexx Nervousa: 1. "I don't have time to learn ARexx." 2. "I'm not a programmer." 3. "I don't need ARexx." 4. "What is ARexx anyway?" 5. "Maybe someday I'll learn ARexx..." If any of these apply to you, you need* ***The ARexx Cookbook****! Guaranteed to cure ARexx Nervousa!* ***$54.90 Postage Paid.***

Circle 148 on Reader Service card.

Who
can you turn to
for the
best coverage
of the fast-paced
Amiga
market?

Amazing Computing of course!

Amazing Computing for the Commodore Amiga, AC's GUIDE and AC's TECH provide you with the most comprehensive coverage of the Amiga. Coverage you would expect from the longest running monthly Amiga publication.

The pages of Amazing Computing bring you insights into the world of the Commodore Amiga. You'll find comprehensive reviews of Amiga products, complete coverage of all the major Amiga trade shows, and hints, tips, and tutorials on a variety of Amiga subjects such as desktop publishing, video, programming, & hardware. You'll also find a listing of the latest Fred Fish disks, monthly columns on using the CLI and working with ARexx, and you can keep up to date with new releases in New Products and other neat stuff.

AC's GUIDE to the Commodore Amiga is an indispensable catalog of all the hardware, software, public domain collection, services and information available for the Amiga. This amazing book lists over 3500 products and is updated every six months!

AC's TECH for the Commodore Amiga provides the Amiga user with valuable insights into the inner workings of the Amiga. In-depth articles on programming and hardware enhancement are designed to help the user gain the knowledge he needs to get the most out of his machine.



Call 1-800-345-3360

Gases & Gas Objects

Aladdin 4D Tutorial Part 2

R. Shamms Mortier, PhD.

The universe is filled with matter from solids to liquids to gases and invisible quantum energy forces that operate on everything. Since we are physical beings, we are more familiar with the "solid" world, the world that we can touch and move. But we also appreciate the wispiness of existence, which is why watching clouds make us wonder and dream. We are, in fact, reminded of the dream world when we observe vague material and phenomena like clouds, flames, smoke, the auroras, and other transparent and translucent reality. Until now, it was hard, if not impossible, to simulate those more ephemeral of nature in our digital Amiga visuals. The "Gas Object" potentials of Aladdin, however, greatly broaden our creative possibilities.

A First

To be sure, several large mainframe graphics systems have software that gives computer artist/animators the option of creating and animating gases. We can verify this by recalling the swirling star objects in the animations created at the Jet Propulsion laboratory in California, and used by NASA promotions and for the openings of specific science fiction TV shows. But up until *Aladdin 4D* came on the scene, there was no way anything like this could be accomplished on a mere microcomputer, so here again, only the Amiga makes it possible. Other Amiga developers may add this ability to their 3-D packages in the future, but only Aladdin 4D can claim it as an active creative process at the moment.

Aladdin's Gaseous Objects

In Aladdin 4D, a gaseous object is really a volume of space whose transparency-density can be altered over time, and which will accept attributes and textures. The editor screen displays just a cubic area which may be moved, set in motion, and resized. You cannot "see" the shape of the gas inside until the area is actually rendered. There are a host of parameters that can be adjusted pertaining to gaseous volumes, and tweaking them carefully can give you animation and creative control over awesome Amiga possibilities. Everything is controlled within a few requesters, the most important of which is the "Gas Object Control" (Figure 1). It is vital that the Aladdin 4D user understand the terms used and processes evoked in this requester in order to have an understanding on what to generally expect, though there are always surprises, when gaseous objects are created.

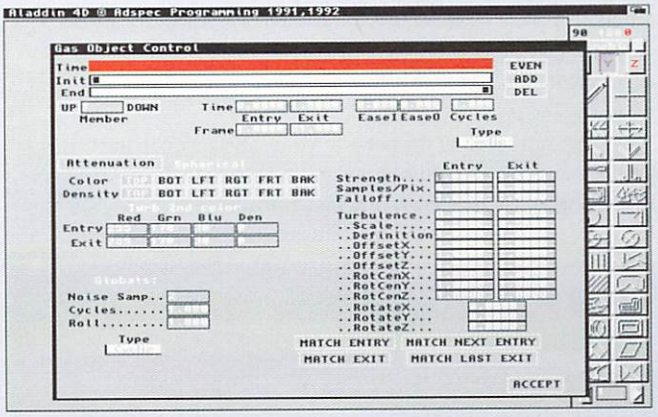
The Gas Object Control Requester

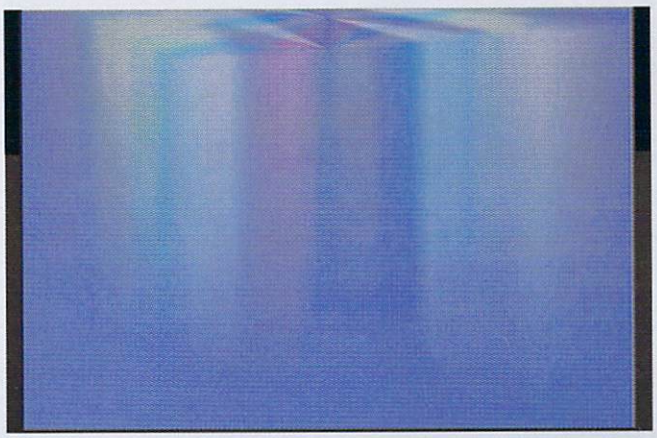
Let's take a basic walk through the parameters and gadgets that inhabit this requester. Starting at the top, we have the frame and time sliders that allow us to target animated processes to specific frames and time segments of our animation. If we are creating just a single frame of art, perhaps useful as a non-animated background, we don't need to concern ourselves much with this aspect of control. These same sliders and gadgets, however, surface in every other control screen in Aladdin 4D, so at some point, a complete familiarity of their use, gained by active experimentation, will be necessary. At the moment, however, we want to dwell on the actual creation of gaseous objects, so let's move to the area below the animation sliders and frame input boxes to the section that will demand our closest attention. First, there is the cycle gadget marked "Attenuation." This allows us to deform the cubic space with expected visual results. The choices are Spherical, Solid (Cubic), Top/Bottom, Bottom/Top, Left/Right, Right/Left, Front/Back, and Back/Front. These last items lessen the gas density in the direction indicated, as flames disappear as they extend farther from their source. Next let's jump to the column of entry/exit areas on the right, and begin with "Strength." Samples/Pix indicates the sampling rate. As in digitized sound, the higher the sampling rate the more accurate and true the result. Very particulate gases can be rendered by raising this rate, but the cost is in multiples of the rendering time. "Falloff" is a setting that determines the rate at which a gaseous object fades in the direction set by Attenuation.

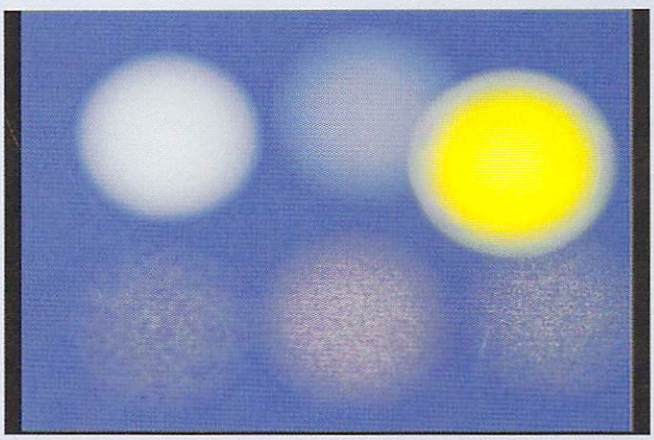
Adding Turbulence

Next we have the Turbulence settings. Turbulence is just what it says, a volatility in the gas towards instability. In an animation, it is in the turbulence settings that beautiful, hypnotic organic movements can be observed. Turbulence in Aladdin 4D is identified as a "noise-based fractal change in density," and turbulent gaseous objects with large scale input have a chunky appearance. The "noise"—number of times fractal noise is applied to create the turbulence—can be set to change over time by altering the density and rotational centers and values, setting your gases in motion. The Turbulence can also be set to "roll" during an animation, changing the perceived density of the gas as it moves. Turbulent Gaseous Objects, especially when the transparency is set to 25 or above, can work well when other "solid" 3-D objects are set inside them. This allows us to simulate moving atmospheres around a planet and organic abstract animations as well. When we want to accentuate the "stringiness" of the turbulence over the initial color of the gas, we increase the "Definition" value and also upgrade the overall size of the strands by decreasing the "Scale."

Remembering that we are working initially with a cubic space enclosed on the edit screen by a boxed area, it can be inferred that the separate six polys that make up the space can have their own attribute lists. Gases receive their color information from the colors set in the attribute list. You can set colors separately for each of the six sides of the cubic space, and create a gas that is multicolored. As the Attribute list also has multiple timing and frame indicators, the colors of a rotating gas can change over time! Until you have seen this in



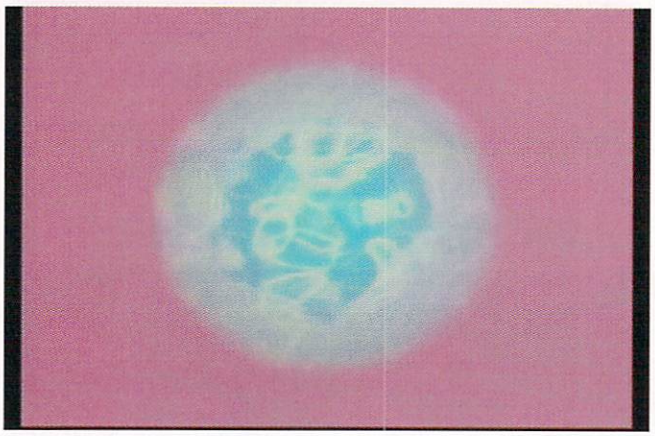




Top to bottom: Figure 1: This is the main requester that deals with gaseous object generation in Aladdin 4D.
Figure 2: This represents an initial experiment with gaseous objects. The attenuation has been set to solid so that we can actually see the cubic bounding area.
Figure 3: Top row, "Strength" L to R: 5, 3, 10 (density 4 and transparency 40). Bottom Row, Turbulence/Scale settings, L to R: 1,1; 1,5; 1,10.

action, the visual excitement is almost too overwhelming to describe. Like other avenues of discovery, it takes dedicated experimentation and time before you get a more intuitive grasp on what is going on.

After setting all of the items to your satisfaction in the Gas Object requester, you must apply two processes to the gas container, Phong shading and at least a minimal transparency. Phong shading

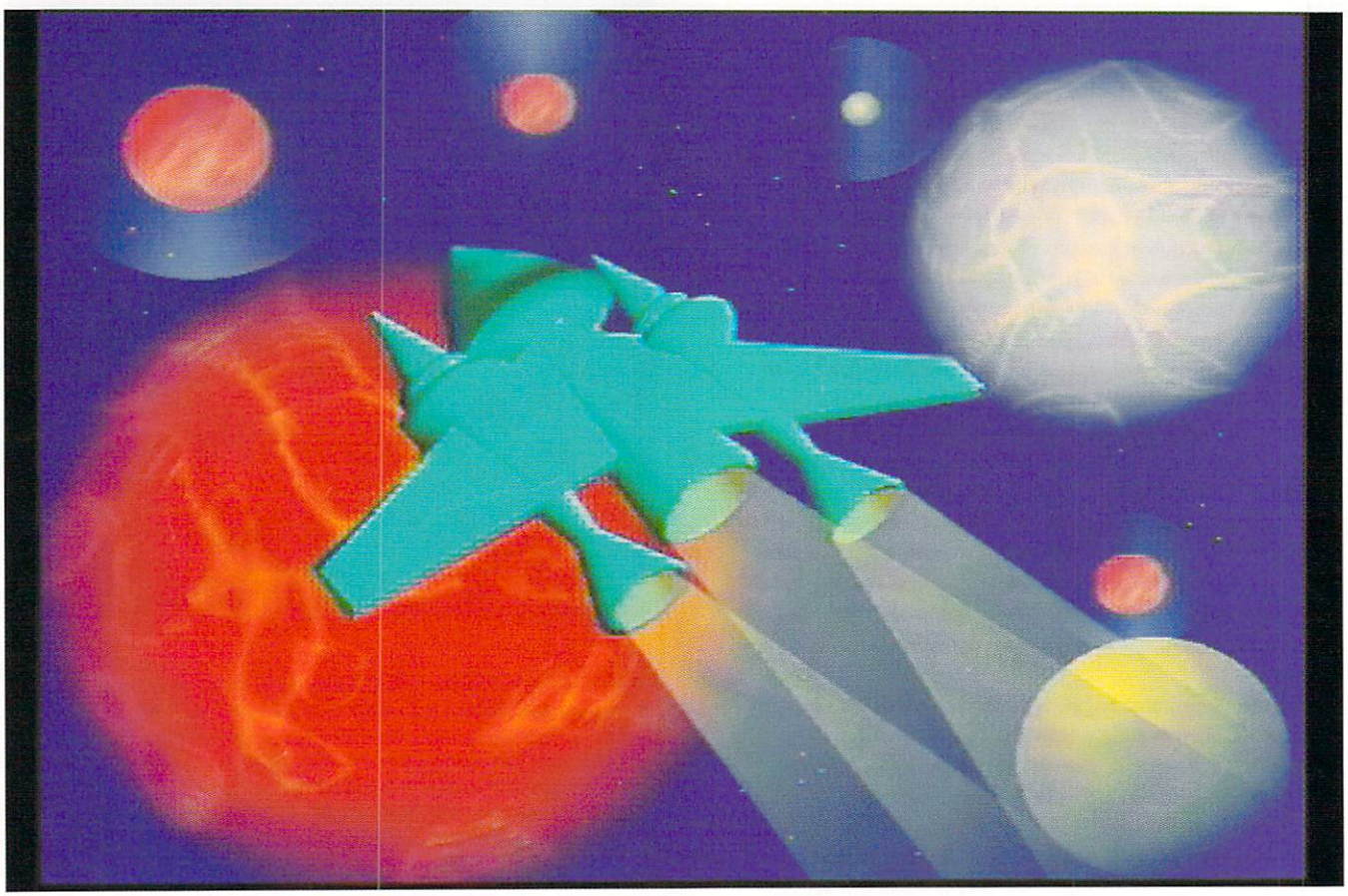


is set in the Polygon/Shading menu, while transparency is set in the Polygon/Attributes list. Refer to the manual for more detail on how to access these items further. As of the Aladdin 2.0 release, a camera cannot fly around inside of a gaseous object, but in a coming upgrade this will probably be possible and should produce some startling animations, especially in a turbulent gas storm! The Deform mode operations in Aladdin 4D do not work in conjunction with the gases at this time, except for resizing the cubic space. All that is really allowed outside of the settings in the gases, Attributes, and Textures requester as far as animation goes is to alter the cubic size of the gas container.

Remember that Aladdin 4D allows you to use animated textures—files saved with incremental numeric extensions—on any object, and this includes gaseous objects as well. Your animated textures can come from altering the in and out values of a procedural texture (*Amazing* Tutorial #1) or from a series of numbered single-frame bitmap files. Very bizarre visuals are produced when you project any texture on a gaseous surface, much more an animated one. Remember that the gaseous object itself can exhibit all sorts of animated changes from the settings in various requesters, so adding a projected animation has to be done very carefully so as not to get too confusing and lose the power of the effect.

•AC•

Please write to:
R.Shamms Mortier
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722



Top: Figure 4, This globe demonstrates adding turbulence to a gaseous object. Above: Figure 5, Here's one example of how you might use gaseous objects in a creative project.



ROOMERS

by The Bandito

[These statements and projections presented in "Roomers" are rumors in the purest sense. The bits of information are gathered by a third-party source from whispers inside the industry. At press time, these rumors remain unconfirmed and are printed for entertainment value only. Accordingly, the staff and associates of Amazing Computing *cannot be held responsible for the reports made in this column. The opinions expressed in this column are those of the writer, who wished to remain anonymous, and are* ***not*** *necessarily those of AC's staff or writers.]*

Springtime for Commodore?

Commodore has been very forthcoming lately about future directions in engineering, but they haven't revealed much about their marketing plans. Lew Eggebrecht has been busy outlining a hardware vision for the future which sounds terrific: higher resolutions, more colors, faster animation, better sound. That's very reassuring to hear. Now Amiga owners want to know what Commodore plans to do to broaden the base of Amiga owners. You may think that as long as you have your Amiga, it really doesn't matter to you if Commodore never sells another Amiga. But it sure does if you ever want to buy more software for your Amiga, or perhaps a piece of hardware. Without a large and growing Amiga market, new hardware and software development will falter. We're already seeing this happen with game software. What if it happened with paint software or word processing? *WordPerfect* has already dropped out of the running. You wouldn't like being left behind like that, would you? No, you wouldn't.

So Commodore's ability to sell Amigas is important to all Amiga owners. And that means Amiga owners should care about Commodore's marketing plans. How does Commodore really feel about the importance of the U.S. market? What are their pricing plans for the future? Will we see some real price decreases in Amigas this year, or just more weird dealer incentive programs and rebates? What progress are they making in their marketing efforts with the A600 or the A1200? Just how is this deal with Merisel going, anyway? It sure would be nice to hear the answers to some of these questions.

Commodore Marketing

So, of course, the Bandito has been busy trying to dig out those answers for you. For starters, let's look at what Commodore has been doing lately with magazine advertising; that may give us a clue. You've probably seen those ads for the A4000 running all over the place. Here's the Bandito's opinion: The "Amiga Guy" is pretty stupid. Using a cartoony drawing to sell a professional computer that is still trying to live down the image of being a game machine is not the way to go. Get real, suggests the Bandito. How about some real stories about users and the incredible things they're doing with the Amiga? Or some real screen shots from real applications? Show those buyers exactly how they can save money by buying an Amiga. In the A1200 ads, show those buyers how they can have immense amounts of creative fun with their Amigas. Do anything, just lose the cartoon image. Amiga owners have enough problems, already.

Second, while Commodore is advertising in a lot of magazines that reach the general computer audience (like *Infoworld*), there's been virtually no press coverage of the A4000 or the A1200 outside of Amiga magazines (and a couple of video magazines). True, *Byte* did review the A4000, but the review was lukewarm at best (sounded like the reviewer didn't really have the machine, but had heard it described by a friend). [*Editor's Note: Sorry, Bandito, but the* Byte *review was extremely positive, an upbeat piece of press after all the silence.*] Listen, Commodore, this machine is so powerful at animation and graphics that the magazines should be jumping all over it. Or has Commodore just blown off the press one time too many? (Horror stories abound of Commodore's incredible chintziness in the past with review machines. Magazines aren't going to go out and buy an Amiga just to review it for you, Commodore. You have to lend them one for a while. Capisch?)

Anyway, what can we figure out about Commodore's marketing plans? Although Commodore does not admit it, they seem to have given up for now the concept of the Amiga as a home computer or a general

business computer. If you look at their marketing materials, everything talks about video, kiosks, and presentations. That's where they really plan to sell the Amiga now. The only ray of hope for a broad-based market is the A600 and the A1200. Unfortunately, while the A600 has the right price (now as low as $299!), it's still stuck with the old chips and a slow processor. The A1200 is the right computer for a home entertainment/education/productivity machine: fast, powerful graphics, affordable. Too bad Commodore didn't put it out two years ago. Now Commodore has to fight an uphill battle with an even steeper slope than before, pressed between sliding PC clone prices and rising videogame power. A *Street Fighter II* arcade game in your home for about $200 with machine and cartridge is a pretty powerful setup.

Caught in this cruel squeeze, the Amiga is being bled to death by shrinking software distribution, as fewer retail outlets carry Amiga software these days. And a shrinking consumer presence, as the PR all goes to the Mac and the PC. Apple's venture into the mass market chain stores with the Performa line is sucking up shelf space that once belonged to the Amiga—not to mention consumer mind-share that once belonged to the Amiga. While the Mac is still underpowered and overpriced compared to the Amiga, it's not as overpriced as it used to be, nor as underpowered. And Apple, in my opinion, has an enormous PR advantage over Commodore.

The A4000 is aimed at the professional video market, presentations, training, and the like. This is also where the '030 Amiga will be aimed. Commodore has a number of sales and marketing programs set up to service these markets, and they've done reasonably well in these rather limited areas. Though Macs and PCs are growing faster than Commodore in these areas, which doesn't bode well for the future.

Commodore plans to market the A1200 to "prosumers" and as a second computer for home entertainment. What's a prosumer? Is it some sort of Japanese athlete, or maybe a genetically engineered vegetable? Perhaps the latter, if you mean some sort of mutant couch potato. A prosumer is the dedicated hobbyist to whom many of the video companies are attempting to sell their fancy cameras and editing decks. Commodore thinks that these folks might very well pick up an Amiga for titling or even editing purposes.

Meanwhile, Commodore has several different A600 bundles put together to address different market segments. The Bandito's favorite is the new A600 box proclaiming it as a Virtual Reality studio; it includes Domark's VR software in the bundle. So it seems Commodore can jump on at least one bandwagon, though it remains to be seen if any consumers will hop on the wagon with them.

The A500 is slated to vanish, an event that will surprise hardly anyone. There's no room for it between the A600 and the A1200 pricing. Oh, and the A600 price will be moved down as far and as fast as possible. All in all, the current marketing plans seem designed to sell to the current Amiga installed base, via Power-Up programs and other means, rather than reaching out to new markets.

So what can Commodore do? Well, they've fixed the hardware part of the problem. You can't complain about the performance of the Amiga or its graphics capability. Once the product line is filled in with mid-range Amigas, they'll have all the right prices and the right performance. A great set of software, too. What's missing? PR, marketing, distribution, and sales.

So, Irving, time to start throwing money at that part of it. Not just a few million at Christmas time, but a multi-year investment program. Keep up the effort in those markets you've already targeted, like video and presentations. But pick something else, too, and go for it. The Bandito suggests going after the home education/entertainment market in a big way with the A1200. Lay some heavy incentives on software developers to get the coolest entertainment and education software developed for the A1200. Open up some new outlets for Amiga software if you have to start your own mail-order catalog to do it. And do lots of advertising to convince parents that the Amiga is a better buy than a Super Nintendo or a PC clone or a Macintosh. The facts are there, Commodore; get up on the rooftop and start shouting.

SELF-IMPROVEMENT SOFTWARE

BrainTrain

The ultimate relaxation system for the Amiga

Now you can easily enter the deeply receptive theta state of consciousness with the help of this highly effective brainwave entrainment system from InSpiral Technologies. User configurable vocal induction mode, with synchronized aural/visual entrainment matrix.

Banish bad habits
Implant good habits
Personality improvement
Relaxation and sleep aid

Three versions available, each with 4 popular self-help subjects:
BT-1 Dream Control, Memory, Success, Exercise
BT-2 Stop Smoking, Creativity, Relaxation, Sleep
BT-3 Lose Weight, Stress Reduction, Relationships, Procrastination.

$39.95 each plus $2.00 shipping

InSpiral Technologies P.O. Box 309 Ellsworth, WI 54011 (715) 273-6180

Circle 103 on Reader Service card.

READY ROBOT CLUB

INTERNATIONAL MONTHLY EDUCATIONAL DISK

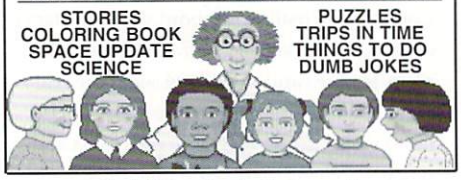
For Kids 5 to 12. Any Amiga 1-MB, KS 1.2 to 3.0, NTSC & PAL. English language only. All original. No ShareWare. Quality Graphics, Speech, Point & Click Menu, Thinking Games, Stories, History, To Do, Space, Music, Coloring Book, Jokes, Parent-Teacher Corner. Hard disk O.K. Since July 1990. Hours of educational fun at your door every month.

FREE To New Members: Fonts Disk, Music Disk

- AIR MAIL WORLDWIDE MEMBERSHIP COST -

U.S. 6mo/$38 YR/$69 Canada 6mo/$42 YR/$77
Other 6mo/$46 YR/$85 Name, Address, Phone
VISA/MC #,DATE. U.S.A. Checks NO C.O.D,
International Money Order $U.S. payable to:

SIGNS ETC. BY D. KNOX
BOX 628, CARMICHAEL CA 95609, U.S.A.
INFO: 916-944-4282 ORDERS: 800-634-2952



Circle 146 on Reader Service card.

VIDIA™

• Amiga Books •

Put your mind on afterburner.

Vidia Guides are packed with information and star the computer and software you love most. Every **Vidia Guide** is a manual *extender*, not a manual replacement. You get hard core info; stuff that you'll use *every day*. Every **Vidia Guide** comes a 100% money back guarantee. You'll be amazed at what a little book can do.

ARexx • Amiga DOS • Workbench
Directory Opus • PageStream • Pro Page
DPaint • Programming • Text Editors

Coming soon: ARexx resource and source code book; guide to Video Toaster

For more information and a catalog, circle our number on your reader service card.

Vidia, POB 1180, Manhattan Beach, CA 90266

Circle 190 on Reader Service card.

The Underground source for AMIGA®
COMPUTER SHOPPING NETWORK
NEVER PAY RETAIL OR MAIL ORDER PRICES AGAIN.
Voice orders (615) 577-5100
Mulituser BBS (615) 573-8888
300-9600 baud
FAX orders (615) 577-1170
Circle 121 on Reader Service card.

The Hard News

Meanwhile, hardware development continues. The A4000T is the first new machine for 1993, to be followed by a 68030 version of the A4000. Later in the year you'll see multimedia extensions for Workbench coming out, though the Bandito isn't sure what they mean by this. Maybe a new speak: device? From third-party manufacturers you'll see a complete 386SX computer on a PCMCIA card that uses AGA graphics to give you complete VGA emulation. Maybe even a 486 computer on a card. IBM emulation is easier than ever with the power of the A4000; the only problem is trying to create a card that will compete with the low, low prices of PC clones. It really doesn't make sense to buy a clone on an add-in card for $1500 when you can get a complete system for that much, complete with monitor and hard drive.

Video Amiga

The Bandito has noticed that a lot of magazines—and even newspapers—are making a big thing out of the new-found ability of Macintoshes and PCs to play little clips of video with synchronized (sort of) audio. Apple has its QuickTime software for both Mac and Windows, and now Microsoft has their version, too. And there are dozens of manufacturers cranking out video digitizing boards for both machines, and boards that let you watch TV on your computer screen, and so on.

The Bandito's not sure what all this is really good for, but one thing is clear: Commodore should tout how the Amiga has been doing this for years. Maybe Commodore should arrange to support some file formats from other platforms, too. Then show all this in a major advertising campaign. After all, the Amiga is far better than a Mac or a PC at any form of video, and cheaper, too.

The Weird Slot

You know, the odd little PCMCIA slot you don't really know what to do with on your A1200 is really pretty cool. From what the Bandito's spies reported at Comdex, PCMCIA looks to be next bus standard for personal computers. IBM showed off a low-energy consumption computer at Comdex with multiple PCMCIA slots. Observers predict all functions offered on PC clone bus cards will be offered in PCMCIA versions, including modems, network interfaces, graphics cards, etc. All we need are Amiga drivers for these things to make them work. And if PCMCIA is really the next industry standard, we'll be seeing plenty of cool hardware add-ons for Amigans. Now if only the A4000 had one of those slots...

Memory Management, Inc.
Amiga Service Specialists
Over four years experience! Commodore authorized full service center. Low flat rate plus parts. Complete in-shop inventory.
Memory Management, Inc.
396 Washington Street
Wellesley, MA 02181
(617) 237 6846
Circle 166 on Reader Service card.

Musical Amigas

The Bandito has to wonder: is Commodore still concerned about this market? They once were, but now it's dominated by Macs and PCs. Fortunately, hardy developers like Dr. T's and Blue Ribbon Softworks are trying to change that. The Amiga's multitasking capability makes it very powerful in performance applications, as a number of musicians have found out. There are some benefits on the Amiga you can't find anywhere else. For instance, Sunrize's audio cards offer more channels than any Mac card; the Amiga is being used for film and TV scoring because of this. But is Commodore following along with their marketing? No way, and that's a shame.

The Amiga as a sound-editing platform is a serious contender. After all, there's a lot of Toaster owners out there who have discovered that they need audio to go with their video. And the solutions exist for people who want to use their Amiga for CD-quality audio recording and editing. Too bad Commodore isn't making more noise about it. (That's CD-quality noise, too!)

While we're talking about editing, doesn't it seem that someone should sell the Amiga as a complete video editing package? Maybe Commodore should find a VAR to help with that, or maybe Commodore should do it themselves. Put all the hardware and software together in one spot, along with all the instructions and cables and such like. One-stop shopping for a complete studio solution. Nah, that's too cool an idea for Commodore. Maybe someone else will pick up on it. That Digital Editmaster from DMI sounds like something that would be a great basis for the package. How about the Toaster, a Sunrize card, a Digital Editmaster, and an Amiga 4000T all in one spot? Maybe some additional programming so that all the software works together well. Ah, what a dream. Maybe NewTek could pull some-

VISIONSOFT
PO Box 22517. Carmel, CA 93922

MEMORY	UNIT	2MB	4MB	8MB
1x32 SIMM-70	$ 149.00	--	149	290
1x32 SIMM-60	169.00	--	169	330
1x4 - 80 SC ZIP	19.50	--	156	308
1x4 - 70 SC ZIP	20.50	--	164	328
1x4 - 70 PG DIP, ZIP	19.00	76	152	300
256x4 - 70 PG ZIP	4.75	76	152	288
256x4 - 70 PG DIP	4.25	68	136	256
1x1 - 70, 80 PG DIP	4.25	68	136	256
1x8 - 70, 80 SIMM	36.00	72	140	280
1x8 - 60 SIMM	40.00	80	150	300
4x8 - 70, 80 SIMM	139.00	--	139	270
4x8 - 60 SIMM	145.00	--	145	280
GVP SIMM 32	199.00	--	199	390
MBX 1200	159.00	--	305	445
PCMCIA	CALL	--	--	--
BaseBoard	--	162	225	--
DataFlyer RAM	--	162	225	385

DataFlyer 500 SCSI . . . 135
DFlyer 500 Express 175
DataFlyer1000 SCSI. . . . 159
GVP A530 Turbo 999
GVP I/O Extender. 229
Supra FAX V32BIS. . . . 295
2.5" IDE 80MB HD . . . 269
High Density Floppy. CALL
A570 CD ROM. 399
2.1 ROM UP/G Kit 89
2.1 Software 45
A1200 CALL

Orders Only: 408-899-2140
Info & Tech: 408-899-2040
FAX: 408-626-0532 BBS: 408-625-6580
COD
Prices & Availability of Products Subject to Change Without Notice
Circle 116 on Reader Service card.

thing like that together; it's really what they've been talking about for years with their "studio in a box" tag line, isn't it?

Compression

Automatic compression software is very popular in the Mac and MS-DOS markets these days. The Amiga has a number of terrific shareware and public domain compressors, but what's lacking is a solid utility for keeping your whole hard disk compressed, transparent to the user. The Bandito hears there's at least one developer working on something like this, but no firm date as to when we might see it. This is an idea whose time has come; an amazing percentage of Mac and PC users have some sort of compression utility at work on their computers. Of course, this is tough to do in real-time with only a 68000, but most serious Amigans have a better processor than that these days. With the Amiga's multi-tasking operating system, compression should be able to go on while you keep working. The Bandito also hears that Commodore is toying with the idea of including system-level compression in a future release of the OS. Wouldn't it be nice to install an operating system and find your hard disk is suddenly twice as large?

NewTek News

NewTek and Commodore may be on better terms these days. NewTek has lost its VAR status because they weren't including Amiga docs and software with their Toaster workstations. Commodore also snubbed NewTek with the A4000. But now NewTek and CBM have patched things up somewhat, and NewTek has gotten the Toaster to work with the A4000. We should see an A4000 Toaster sometime this year. Toaster 3.0 software continues to get even bigger and better, but as it does the release date also gets later and later. The Bandito hears you'll be able to create your own effects, using *Lightwave* to define a motion path and distortion for your live video.

New CD-ROM Challenger: 3DO

Trip Hawkins, founder of Electronic Arts, has been laboring away for the past couple of years on a top-secret new project under the new company name of SMSG. Now, the wraps have come off with a bang, and the company has a new name: 3DO. And a machine to go with the name: It's a CD-ROM machine with some custom graphics chips designed by none other than RJ Mical and Dave Needle. Those are two names Amiga old-timers will recognize from the original Amiga team; they later went on to invent the Lynx handheld game machine, which ended up being sold to Atari. Anyway, this new wonder machine will be arriving in time for Christmas this year, from Panasonic as well as other manufacturers. 3DO has licensed the design to several manufacturers in an attempt to become the next electronics standard—much like CD-I has done, without great success.

So what does it do? If you listen to 3DO's PR, just about everything. Games, encyclopedias, Photo-CD, CD+G, education, movies on CD, etc.—is this sounding familiar to you, too? The machine features a double-speed CD-ROM drive and a RISC processor along with custom graphics chips, and supposedly it has a hundred times more horsepower than a video game. Of course, you'll hook it up to your TV and stereo for output. In the future, they hope to add connectivity to cable for two-way TV, multiplayer games, movies on demand, and suchlike. And all this is yours, when it ships, for about $700.

Which is where the problems begin. As CDTV and CD-I have discovered to their sorrow, people aren't willing to shell out that much money for machines of dubious value. On the other hand, Sega found that they sold over 200,000 CD-ROM players for $299 over Christmas, for something that plays games, with only a few titles available, too. So 3DO may have a rough time getting sales until they can cut the price down to less than half of their initial target.

The other big problem is in software. 3DO claims to have a lot of developers lined up, and that they have lots of tools to make title development easy. Well, that may be, but if the software is just shovelware from existing titles they'll have a hard time finding buyers. 3DO needs some "gotta-have-it" titles that you can only find on their machine, and that are significantly more cool than what you can get elsewhere. Only time will tell if they get any software that fits that description.

Although 3DO tries to tell you otherwise, the Bandito thinks this box will be seen mostly as a game machine. And $700 is just too much for a game machine—even if it's a game machine that has an encyclopedia, or can play audio CDs. They'd better get the price down in a hurry, or find some other reason for people to buy it. That $500 to $700 price range hasn't done much for sales of CD-I or CDTV, as you well know. Here's another competitor for CD-ROM machines: a CD-ROM drive for your computer. You can already get them for as little as $200, $400 for a good CD-ROM drive. And with those drives you can get CD-ROMs that can help you in business: clip art, information, fonts, textures, and so on. So the pure CD-ROM machine has competition all around it; that's a real tough sell job. Good luck, 3DO. You'll need it. *[Editor's Note: The suggested retail price listed above was for an unannounced Panasonic machine. 3DO will not be manufacturing devices. The company was created to produce, maintain, and improve the basic 3DO standard.]*

•AC•

PSST!

Do you know of any gossip, rumors, scuttlebutt, or just plain dirt? If so, be come a professional tattle-tale and pass these tidbits on to :

The Bandito
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140

Vision Modeller 3D

Version 1.2

R. Shamms Mortier

One of the most enjoyable things an Amiga artist/animator can do, when it's affordable, is to purchase a piece of software and watch it mature over time. Seldom is any 1.1 graphics package usable for professional results, and that includes most every "famous" 3-D Amiga package on the market. It's only about the 2.0 version that starts to show features and alternatives worth applying to professional applications and tasks. I know, for I own all of the Amiga renderers around, and have watched them change and evolve over the years. In this regard, *Vision Modeller 3D* ($129.00) is no different. It's got a way to go with features to redress and to add, but it already contains some options that Amiga artist/animators may want to experiment with.

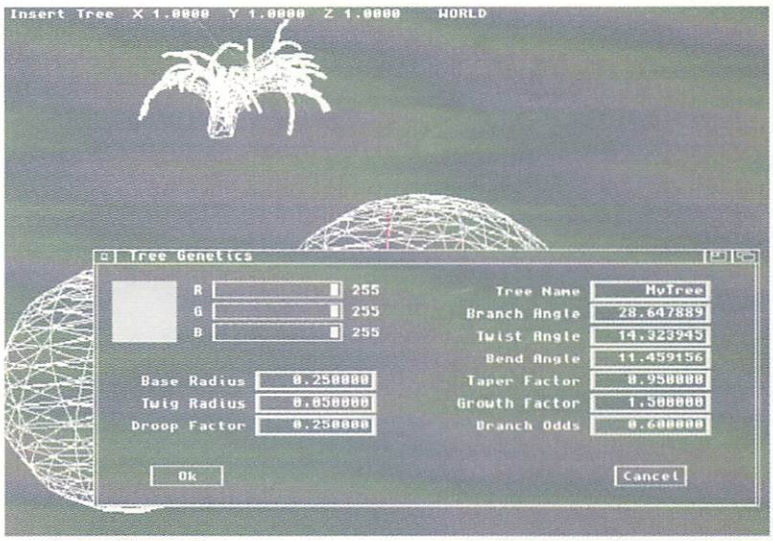
History

For a good while, Vision Modeller 3D was a shareware program, its documentation presented on the disk. Like all good developing software, the documentation contained, as it still does, a listing of what was added in each succeeding upgrade. Now Vision Modeller has a printed manual, which looks very nicely put together.

The Tools

Vision Modeller 3D has a 3-D perspective screen akin to other Amiga 3-D packages. The default screen, which has to be toggled off for normal viewing, addresses the X-Specs 3D glasses. In fact, X-Specs might have been the motivating reason that Mr. Schader embarked on this adventure in the first place, as the continued reference to the 3-D glasses appears frequently in the documentation. One of the strangest aspects of the software one has to get used to is the way the mouse is used. The left mouse button addresses the on-screen cursor, and it's easy to fly it into invisibility. It must be called back to the origin or center of the screen, with a specific menu command. The right mouse button divorces itself from the cursor, and leaves it behind while you head for the menu bar. Those Amiga users with a three-button mouse can use the middle button to move in the Z direction (in and/or out of the screen). It took me a while to get the hang of moving and clicking in this 3-D world.

VM 3D will load and save *Sculpt*, *Imagine*, DXF, and its own formats. It renders objects either in HAM or as "Pixmap" files. The latter can be converted to IFF24s with an onboard program called "PPMto24," a public-domain utility. In order to render and raytrace the objects created, other Amiga software is needed. In Figures 2 and 4, I show renderings accomplished by importing VM-3D files into *Aladdin 4D*. The screen view modes can be set to accommodate most of the standard Amiga modes. This is accomplished through the loading of specific "configuration" files, and even addresses the new Amiga productivity modes. Configuration files can be



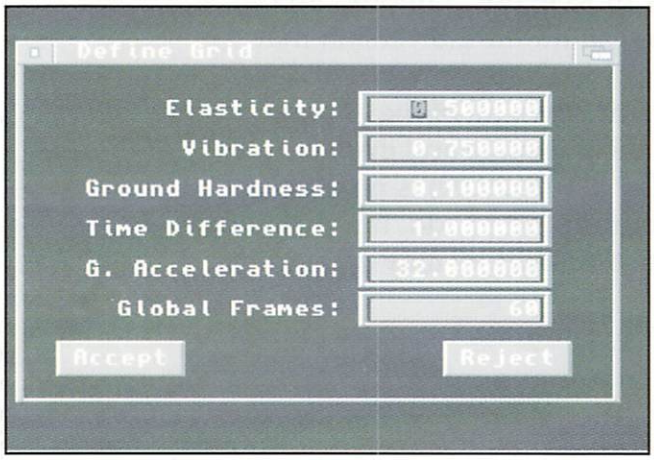
Here is VM 3D's Genetics Lab requester, showing the parameters set for "fractal tree" growth.

generated in any Amiga ASCII text editor, then saved for VM 3D input and use.

VM 3D's workspace is a virtual-reality world, but you can also choose to view the space in Top, Bottom, Front, Back, Right, or Left planes. This makes object creation easier, saving the 3-D perspective view for image generation and previewing. A grid can also be toggled on or off. The camera or eye position has an automatic light attached to it. Two movements are essential to understand in this software for eye and object viewing: Rotation and WalkThrough. With Rotation, your view is rotated around the view center on any of the three world axes, X, Y, or Z. WalkThrough is a little different. It allows full interactive movement within the 3-D environment itself. You can move forward or backward and tilt or cock your head accordingly.

Creating and Editing Objects

Objects can be created with points, lines, and arcs, as well as importing objects in the formats VM 3D uses. Copying, rotating, moving, and mirroring objects are allowed. In addition, VM 3D generates primitive objects, including: cubes, cones, spheres,



The Dynamic Motion requester has controls that cause objects to move in an elastic fashion.

hemispheres, torus, modified torus (bumpy), VonKoch snowflakes, and fractal trees. Figure 3 shows the fractal tree requester that allows you to set parameters for variable generation. This area is called the "Genetics Lab," and I think a separate piece of software with this name and more options could do quite well in the Amiga market. The fractal "trees" that are created in VM 3D vary from pseudo-bushes to shapes that resemble 3-D polygons, depending upon the parameters set. The best way to get a hang of the process is to slowly change the settings contained in the tree default file, and to take visual note of the results. If you change the parameters too radically, or alter too many at once, you will not be able to discern what you are doing. As you might see from Figure 1, the Genetics Lab requester has several input areas that can be varied. The "tree" depicted in Figure 2 is more like a strange bush then a tree, and other bizarre shapes can be created as well.

Dynamic Motion: A Special VM 3D device

If only VM 3D supported IFF ANIM5's and the new Amiga 256-color hi-res mode, this feature would be a miraculous addition to the Amiga animator's toolkit. As it is though, even with limited output and applications, it still is the promise of things to come. Here, different force and deformation values can be set for VM 3D objects, as well as velocity and direction. All settings are applied in the Dynamic Parameters Requester, and they are as follows:

1. **Elasticity**- the amount of time elastic forces need to act on an object in microseconds. Less rigid objects deform at normal animation speeds.
2. **Vibration**- the shudder of an elastic object.
3. **Ground Hardness**- the ground set as either very hard or as an elastic membrane.
4. **Time Difference**- the amount of time it takes an object to travel on a set vector.
5. **Gravitational Acceleration**- the effect of gravity on an object, in feet per second per second.
6. **Global Frames**- the number of frames to be contained in the animation.

The animations created with this module take a long time to generate, and can be created in any of the accepted VM 3D formats mentioned. If there was ever a need to address the ANIM5 standard, this is it. With a little help, this could be one of the most enjoyable and experimental places in any recent Amiga animation software. VM 3D, however, expects that the actual rendering will take place somewhere else, so it merely saves the frames as object files for your renderer to finish. Still, it makes the entire package worth investigating. A tutorial in the manual walks you through a way to generate an animation in Sculpt using the Dynamic module.

Conclusions

If Mr. Robert Schader, the developer at ShaderSoft, can hang in there and keep upgrading his software, version 2.0 should be able to compete with other Amiga 3-D packages on the market. Some things are desperately needed for that to happen, however. First, the software has to write standard IFF.24 files, and it wouldn't hurt to support the AGAtha formats either, or for that matter, DCTV, *OpalVision*, and the *FireCracker 24*. The "tree" objects should have a bit more organic look, especially the squarish trunks. A more developed tutorial concerning parameters of fractal trees is also needed. There should be a way to stop the rendering of a picture immediately, as well as a way to get the rotation of a scene to halt more effectively. ANIM5 animations should be addressed and generated. The "Dynamic" animation capacities of this software will probably spur others in the same direction, as this is a great idea for all Amiga animation packages. Those Amiga users who own X-Specs 3D glasses will want to investigate this package further. I think this package holds potential for the implementation of new Amiga animation tools and processes to come, and I would suggest that Amiga-obsessive artist/animators might want to add it to their repertoire of goodies to experiment with. New "Savers" need to be added—*VideoScape*, *Aladdin 4D*, *LightWave*, and *Caligari* to name a few. VM 3D is another of what I have called "Generic Modelers" in other articles, and as such, it needs some upgrading to be placed in the same category as other competitive programs. With the already special features being developed in this software, a continued effort to address some of the package's anomalies might make it a serious contender in the near future. •AC•

Vision Modeller 3D
ShaderSoft
3631 Colby S. W.
Wyoming, MI 49509
(616) 531-6083
Inquiry #239

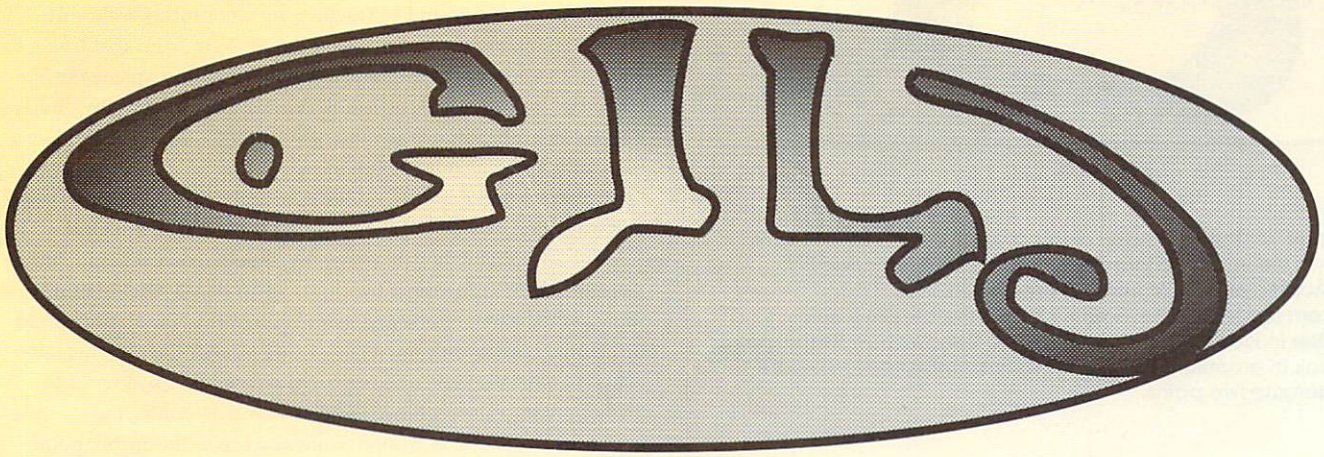
Please Write to:
R. Shamms Mortier
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140

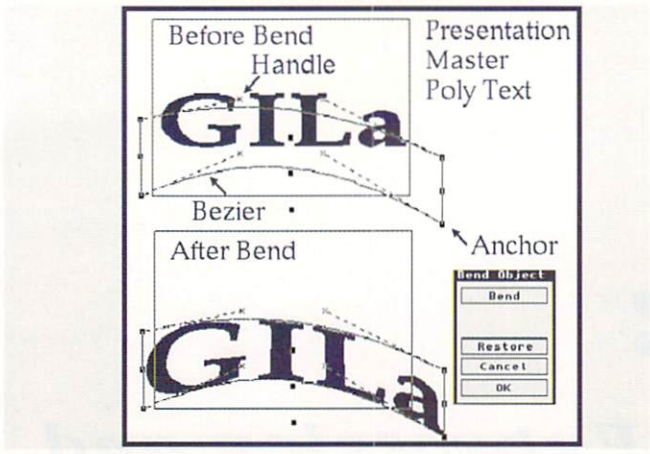
Fun with Lettering:

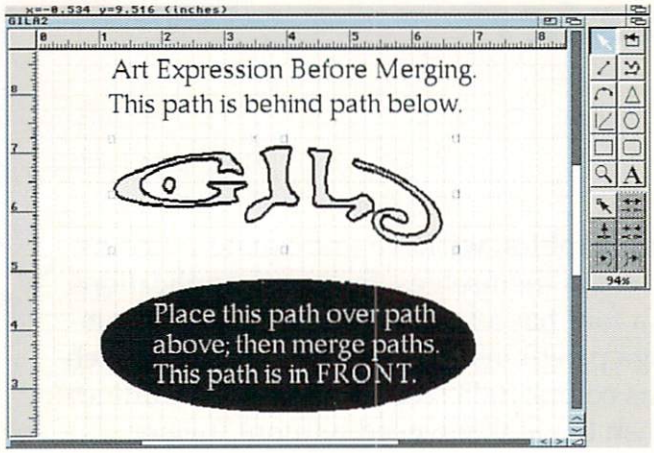
A Project in Art Expression and Presentation Master

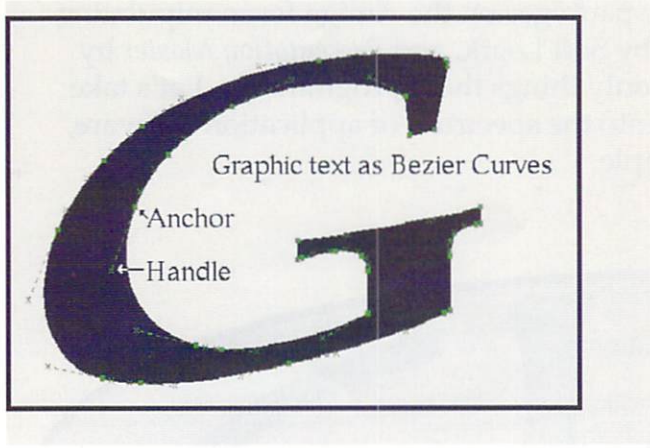
by Merrill Callaway

Whenever we create logos or presentation graphics, we have immediate concerns over not just text, but over the shapes of the letters themselves. In simple applications, choosing an appropriate font will suffice, as a font has a typeface—a distinctive "family resemblance" to the alphabet. Many Amiga programs include scalable fonts which can be sized by the user, filled in with various colors, italicized, or used as an outline font, and in most instances this will accomplish the look we need without further effort. There are times, however, when a little artistic effort using appropriate software can yield results beyond the scope of even the most complete font library. This tutorial is about using two versatile software packages on the Amiga for manipulating the shapes of letters and text: *Art Expression* by Soft Logik, and *Presentation Master* by Oxxi. Text manipulation is by no means the only things these programs do. Let's take a brief look at where these two packages fit into the spectrum of application software, and then go on to focus on our specific example.









Page 75: The final result of this project is in an EPS file which may be imported into PageStream as an imported EPS Graphic or printed from Art Expression.
From top to bottom: Figure 1 shows the bending before and after in Presentation Master. Figure 2 shows how Bezier curves look in graphic text. Figure 3 shows Art Expression before merging two paths.

Presentation Master

Presentation Master (PM) is a multi-media package intended for two primary uses of what PM calls slides. Slides may be output as hard copy to a printer, or they may become part of a computer slide show displayed on the screen, and may be sequenced, transitioned, and "vulcanized" (which is like compiling) into a stand-alone, self running multi-media show which may be exported to another Amiga. Hard copy may include transparencies, lecture and outline notes, 35mm slides (through an appropriate digital film recorder), or large posters tiled from many printed pages. PM v1.0 exports 24-bit color and PostScript, but not, alas Encapsulated PostScript EPS, although it will import EPS. Many scalable fonts come with the package. There are features to generate charts, graphs, and data files, backgrounds, and text, as well as a full-featured "slide sorter" to put complex programs together. These features fill what must be over a 300-page manual! Among the most interesting PM tool sets is a complete structured paint program with the facility to make what PM calls "poly text," text which may be warped and distorted in useful ways to make attention grabbing slides. We will look at poly text in this tutorial.

Art Expression

Art Expression (AE) is an "Amiga Illustrator," designed primarily to be used in desktop publishing to paper or transparencies. It is a full featured, color, structured drawing package designed to augment *PageStream* or function as a stand-alone drawing package. It imports *Adobe Illustrator 88* clip art directly, and outputs its own EPS files which may be taken into PageStream but not screen previewed there. AE supports the Amiga standard for structured drawings, IFF DR2D format, and allows CYMK color output for color separations. Art Expression can convert text fonts to editable graphic objects using Bezier curves. AE includes a trace function in Bit Map Editor (BME) which will convert an IFF bitmap into a DR2D structured drawing format.

Why Use Structured Drawing?

Both PM and AE make structured drawings instead of bitmaps, although PM will allow you to save a structured drawing as an IFF bitmap. Paint programs such as *Deluxe Paint IV* deal exclusively with bitmaps. A bitmap is like a mosaic tile floor where the dimensions of the tiles represent the resolution of the image in pixels or picture elements: larger tiles make low-resolution, and smaller tiles make a high-resolution. The bitmap contains information about resolution and instructions for coloring each tile with exactly one color from the palette. It is easy to imagine that trying to color in tiles to make a diagonal line will only approximate the line with stair step "jaggies" if we look at it close up. That's why bitmaps don't scale well. Magnify the image sufficiently, the jaggies appear, no matter how fine our resolution.

A structured drawing, on the other hand, is different in concept and execution. Structured drawing files contain mathematical formulae describing how to draw, say, that diagonal straight line as a vector. A two-dimensional vector is an "ordered pair" of numbers representing a magnitude and a direction from some starting point. Structured curves are named Bezier curves, after their mathematician inventor. Visually, a Bezier curve is composed of a series of anchor points, each with two handles which determine the curvature of the line as it approaches and leaves the anchor point

through which it must pass. The angle between the anchor point and each handle as well as the straight line distance between the anchor and each handle determine the curvature and orientation of the line through the anchor. Bezier curves are a way of representing complicated curves in a plane using only ordered pairs of numbers (vectors). The easiest way to understand Bezier curves is to use either PM or AE and play with them. After a short while, they become intuitive. Both programs let you click-drag on either of the handles or on the anchor point to move them; and to move groups of points and/or curve segments. The upshot is that a structured drawing is independent of the final scale of the drawing. Output will print at the full resolution of the device used. Lines look cleaner and sharper, and jaggies will not appear if the image is magnified. Clip Art is structured and may be scaled with impunity. Pairs of numbers make for a compact drawing file size.

The Project

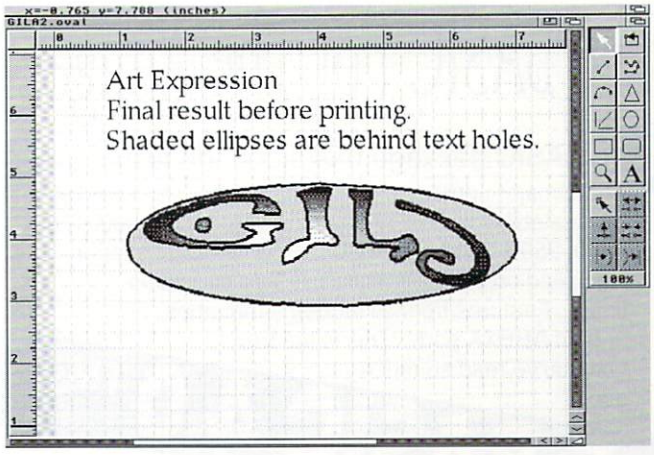
My idea for a logo for the acronym "G.I.La." was to make the word GILa self-referential by forming the letters so that they resemble a Gila monster lizard. I noticed that a capital G could be deformed into a lizard's head and the little "a" could become a tail. The vertical stripes of a gila monster could be represented by the "I" and the "L". The GIla logo is copyright 1993 by Merrill Callaway, but you may borrow my techniques to apply to your own logo whether it looks like an animal or not!

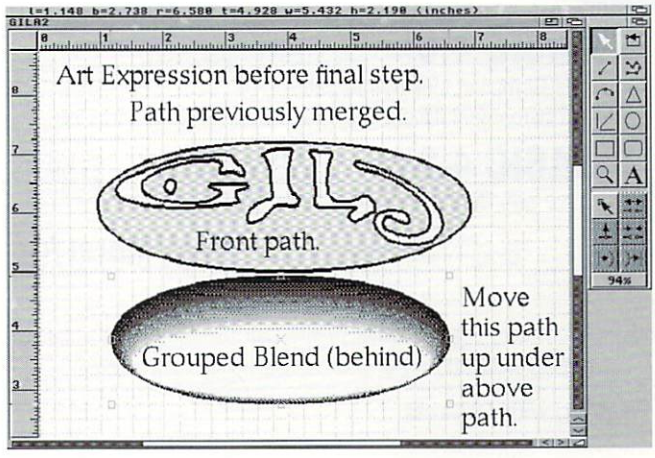
Poly Text

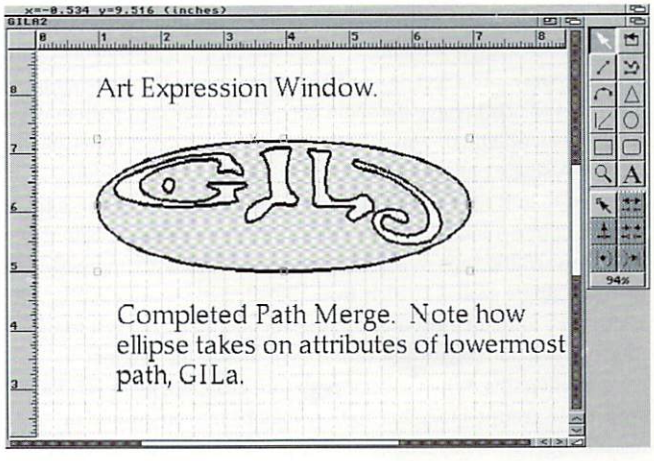
Presentation Master Poly Text allows you to warp and distort text in interesting ways. I could have done this project all in Art Expression, but I didn't have AE during the initial stages. At any rate, it is easier to make a unified warp of text in PM, because you can adjust the "envelope" around the text easily. In AE, you must draw a shape (called a "path") and then fill it with text, a process that is not as intuitive or as easy as in PM. Poly Text is unique, and there are some useful interchanges between PM and AE. I started out with an annotation paint layer (only graphics) in PM. Then I opened the Create menu item and selected Poly Text under the Other item. After I distorted and bent the text "GILa," I saved the image as an IFF under the Project/Output menu. This brings up one disappointment I have about PM. Its structured paint module ought to be able to export objects as EPS files in Adobe Illustrator 88 or DR2D format for interchange with Art Expression and other programs such as PageStream. PM would become a great stand-alone drawing program that way? As it is, you can only transfer data by way of IFF bitmaps that you trace in BME. I exported the warped text as IFF and worked on it in Deluxe Paint IV. If I had had AE in the first place, or had spent more time in PM, I could have eliminated this step, but sometimes drawing in a bitmap paint program gives you more facility with the image.

Tracing

BME allowed me to trace the IFF image of "GILa," painted into more of a lizard picture. I traced the area around the word picture using the defaults of BME. In a few seconds, I had a DR2D format image that I could import by "placing" into an Art Expression page for further work. By means of Bezier curves in AE, I manipulated the letters into their final shapes.







From top to bottom: Figure 4 shows Art Expression afetr the two paths are merged. Figure 5 places a blend behind a merged path. Figure 6 is the final result after the shaded text is complete.

The BASIC For The Amiga!

One BASIC package has stood the test of time. Three major upgrades in three new releases since 1988... Compatability with all Amiga hardware (500, 1000, 1200 2000, 2500, 3000 and 4000)...Free technical support... Compiled object code with incredible execution times...Features from all modern languages and an AREXX port... This is the FAST one you've read so much about!

F-BASIC 4.0™

Supports DOS 1.3, 2.0 and 3.0

F-BASIC 4.0™ System $99.95

Includes Compiler, Linker, Integrated Editor Environment, User's Manual, & Sample Programs Disk.

F-BASIC 4.0™ + SLDB System $159.95

As above with Complete Source Level DeBugger.

Available Only From: DELPHI NOETIC SYSTEMS, INC. **(605) 348-0791**

P.O. Box 7722 Rapid City, SD 57709-7722

Send Check or Money Order r Write For Info. Call With Credit Card or C.O.D.

Fax (605) 342-2247 Overseas Distributor Inquiries Welcome

Working with Objects

Both PM and AE use objects, although AE calls objects paths. There are two important distinctions to be made: Grouped and Ungrouped objects (paths); and Merged and Split (PM calls them Combined and Burst) objects (paths). Path is the more correct term because a structured drawing is a mathematical formula for the path to take to draw an object. We will use AE nomenclature, realizing that PM's objects behave the same way. Only a selected path may be operated on or edited. You select a path with an Object Tool (the arrow). A single path may have only one line and fill attribute assigned to it. If several paths are on the screen, you may place them in front of or behind each other. There are menu commands to move paths toward the back or front. When several paths are merged, then one single path is created from the selected separate paths. AE assigns the line/fill attributes of the path behind all the rest to the final merged path regardless of the attributes of the original component paths. When several paths are grouped, however, they are merely grouped together so they may be moved around or resized together. The members of the group retain their original attributes. Why is this an important distinction? Because of the neat special advanced effects you can get.

Making Holes

Let's look at the letter "O" for example. We could create an "O" by drawing a black ellipse and then a smaller white ellipse inside it, and then grouping them together. That's fine until we want to put the "O" over a line drawing of something else and want the lines to show through the center (called a counter). Then we must merge paths. Merging has the special logical property called Exclusive Or (XOR) which means that we have a composite path where there was one *or* the other original paths, but *not both*. The counter is where both ellipses occurred so it is out of the path and becomes a transparent hole instead of a white-filled area.

Custom Shading

We must convert text to a graphic object in AE from its text format before we can change its shape. Once any text becomes a graphic, it becomes a merged path. If we merge graphic text with another shape that covers all or part of the text, then the letters become holes in the shape. We can then group the result and place the shape with text holes over a blend of colors. Blend is a grouping of objects transitioning from one to another that AE can make automatically.

After we trace and place in an AE drawing, we have one path for the entire word, "GILa." I needed to magnify and work on one letter at a time. I selected the path and then under the Effects menu, I Split Path to turn each letter into a separate path. Split is the inverse of Merge. I magnified each letter in turn and then used the Edit Tool to move the Bezier anchors and handles, adding or deleting points until the letters were smooth and reshaped to the final form. With the Object Tool, I adjusted positions of entire letters.

Next, I dragged a box around all these paths, selecting them all and merged them back into one path. I selected a 20% black fill (light gray) and a 3-point line characteristic. Then I drew an ellipse big enough to cover the entire lizard word GILa and placed it in front of "GILa," centered over it. Dragging a box around these paths with the object arrow tool selected them both. Then I chose Effects/Merge Paths to make one path with gray fill and a heavy black line. The ellipse picked up these attributes during the merge.

Finally, make a blend of a black ellipse with a smaller white ellipse inside it. Select both. The Effects/Blend menu item lets us specify 30 steps to the blend. Thirty separate paths are rendered and left selected. Group them into one object you can send to the back and drag behind the ellipse with the text holes. Resize this background slightly if it peeks from the edges of the text ellipse. Select all and group. Now the gradient shows through the holes and we are done!

•AC•

Please Write to:
Merrill Callaway
c/o Amazing Computing
P.O. Box 2140
Fall River, MA 02722-2140

DO YOUR SHOPPING, THEN CALL US!

AMIGA

A4000 Computer	CALL
A1200 Computer	CALL
A600 Computer	CALL
A600 w/85MB HD	CALL
A590 20MB HD System	$239.00
A570 CD-ROM	$415.00
CDTV	$574.00
1084S Monitor	$279.00
A2386 SX NOW 25Mhz Bridgeboard	$499.00
A2320 Flicker Fixer	$149.95
A2232 Multi-Serial card	$249.00
A520 Video Adapter	$27.95

CBM CHIPS

Kickstart 2.1 Upgrade Kit	85.00
Kickstart 1.3	26.00
1MB Agnus (8372A)	42.95
2MB Agnus (8372B)	79.95
Super Denise (8373)	33.00
Paula (8364)	18.95
CIA (8520)	9.95
Gary (5719)	13.95
2620/2630 Eprom Kit for CBM Accelerator	35.00

CBM A2024 Hi-Res Monochrome Monitor

- 1008 x 600 Resolution
- 14' Paper White Display
- Supports ALL Amiga Models
- Supports ALL Display Modes
- Supports NTSC and PAL
- Perfect for Programmers & Desktop Publishing
- Originally $895.00

NOW $199.00

MEMORY CHIPS

IVS 1MB SIMMS	29.95
1x8-80ns SIMMS	32.00
1x8-70ns SIMMS	34.00
1x8-60ns SIMMS	36.00
4x8-80ns SIMMS	109.00
4x8-70ns SIMMS	124.00
4x8-60ns SIMMS	129.00
1x4-80ns Static Col. ZIP	Call
1x4-80ns Page ZIP	Call
1x4-80ns Page DIP	Call
1x1-100ns DIP	Call
256X4-80ns DIP	Call
A4000 SIMMS	Call

Maxtor 213MB 15ms LPS 64K Cache

$399

US Robotics Modems

16.8K Courier HST with fax	595.00
16.8K Courier HST Dual w/ fax	925.00
Courier v.32bis	449.00

GVP

A500-HD8+0MB/120	589.00	A3000-Impact Vision 24	1675.00
A500-HD8+0MB/245	Call	A2000-IV24 Adapter	39.00
A530-HD8+1/120	995.00	VIU-CT	499.00
A530-HD8+1/245	Call	Tahiti-II 1GB (35ms)	3300.00
A500-PC286/512	119.00	Tahiti-II 1GB Cartridge	299.00
A2000-HC8+0MB	165.00	Syquest 44MB Removable	275.00
A2000 Series II-22Mhz/1MB	549.00	44MB Cartridge	65.00
A2000 Series II-33Mhz/4MB	750.00	Syquest 88MB Removable	385.00
G-Force 030/25Mhz/1MB	595.00	88MB Cartridge	119.00
G-Force 030/40Mhz/4MB	839.00	Impact XC Ext. case	250.00
G-Force 030/50Mhz/4MB	1299.00	FaaastROM 2000 Kit	35.00
G-Force 040/28Mhz/2MB	975.00	FaaastROM 500 Kit	45.00
G-Force 040/33Mhz/4MB	1649.00	Cinemorph Software	109.00
SIMM32/1MB/60ns	59.95	Phonepak VFX	399.00
SIMM32/4MB/60ns	195.95	DSS8 Sound Sampler	79.00
1MB SIMMS-GForce A3000	Call	I/O Extender	195.00
G-Lock Genlock	399.00	Image F/X	239.00

ASK ABOUT OUR ACCELERATOR, HARD DRIVE AND MEMORY UPGRADES!

LASER PRINTER MEMORY

HP II, IID, IIP, III, IIID, IIP AND ALL PLUS SERIES

Board with 2MB	87.50
Board with 4MB	145.95
Deskjet 256K Upgrade	69.95
2 Boards (for 500 Series)	130.00

ACCESORIES/MISC.

DKB MChip board with 2MB Agnus	269.00
Multi-Start 2 Rev 6A	53.00
Kick Back ROM Switcher	35.00
68030 50Mhz CPU	**199.00**
68882 50Mhz Math Co	**139.00**
Safeskin Protectors	**Call**

HARD DRIVES

Quantum - Conner
Seagate - Fujitsu
Western Digital
At unbelievable prices! Call for prices!

Western Digital
60MB 2.5" 19ms
$199

SPECIAL

AMIGA 2000
BRAND NEW
$699.00

A2091 Controller
$65.00
Maxtor 7120S
120MB SCSI
$315.00
Both A2091 & 7120S
$359.00
Add 2MB RAM to 2091
$80.00

A2630 Accelerators

68030/68882 25Mhz
4MB 32bit RAM
Newest Eproms **$529**

MINDSCAPE
POWERPLAYERS
JOYSTICK
1 = $8.95 2 = 8.50 each

CSA ROCKET LAUNCHER

Doubles *GVP* 25MHz & Commodore 2630 Accelerators to 50 MHz!

$499.00

Cables, Power Supplies, Keyboards, Disk Drives

VECTOR → THIRD GENERATION 68030 PROCESSOR ACCELERATOR FOR THE AMIGA 2000

BY INTERACTIVE VIDEO SYSTEMS

TESTED & CLOCKED AT 25 MHZ - W/68030 & 68882, EXPANDABLE TO 32MB RAM W/ SCSI CONTROLLER. FEATURES PROPLEX, SCSI SHARE™ NETWORKING, RAM & SCSI USABLE IN 68000 MODE.

$599

CSA

DERRINGER - Running at 25Mhz w/ MMU 4MB 32bit RAM Exp. to 32MB, w/ 68881 **$499** 68882 add $75 / 68882-50Mhz add $150 8MB version add $199.

DeVine COMPUTER SALES

18 Wellington Drive
Newark, DE. 19702
(800) 578-7617 ORDERS ONLY
(302) 836-4138 Info 10AM-6PM
(302) 836-8829 Fax 24 HOURS

Visa / Master Card Accepted. Prices And Specifications Are Subject To Change Without Notice 15% Restocking Fee On All Non-Defective Returned Merchandise. Call For Approval RMA# Before Returning Merchandise. Shipping And Handling For Chips Is $4 COD Fee $5 Personal Checks Require 10 Days To Clear. Call For Actual Shipping Prices On All Other Items. **If You Don't See It Here, Call Us!**

THE GRAPEVINE GROUP, INC.

AMIGA North America's Largest Supplier of Amiga Custom Chips. AMIGA

AMIGA UPGRADE CHIPS		AMIGA POWER SUPPLIES	
8364 Paula chip	18.95	A500 200 WATT Big Foot UniversalSwitching with fan	86.95
8362 Denise chip	18.95	A2000/fan/200 watts orig. Amiga	99.00
5719 Gary chip	14.95	A500 45 watt (heavy duty)	67.50
8520A CIA chip (2 for $18.00)	9.95		
1.3 ROM Kickstart	21.95		

Advanced Amiga Analyzer

By Wilcom Australia. Just released-a combination of hardware & software that completely diagnoses any Amiga. Gives status of all data transmissions/signals, disk drives, all ports, buffer chips, alignment, joystick ports, read/write errors and tells what chips are bad **$79.95**

NEW! Amiga 500 Motherboard

Now for the first time, and only at Grapevine, purchase a NEW A500 motherboard at prices lower than an Amiga dealer pays! Each board contains 1.2, 1/2 meg Agnus, (2) 8520, 5719, 8362, 8364 & 68000-8. 90 day warranty. Revisions vary. **$94.95**

Switch-Itt: Keyboard ROM Selector
Most Popular ROM Switcher

Electronic ROM selector switch by Global Upgrades Inc, allows for compatibility of ALL your software. Switch between 1.3 or 2.0 ROM from your keyboard. Does not overlap the 68000. **$29.95**
Buy **Switch-Itt** from us with the **1.3 ROM** for **$49.95**
Buy **Switch-Itt** from us with the new **2.05 ROM** for **$56.95**

A2000 Amiga Computer

Imagine an A2000 with all the latest chips (8372,New 2.05 ROM operating system and Super Denise), new keyboard, mouse and owner's manual for hundreds of dollars less! Reconditioned demonstrator. 90 day warranty.Get them before supply runs out **$549.95**

NEW! 2.1 System Upgrades

2.04 ROM chip only (no books or diskettes) **$34.95**
2.05 ROM chip only: NEW, enhanced latest revision for high density drivers, PCMCIA slot, etc. Just released **$35.95**
2.1 Complete kit (#AS215): includes ROM, books and diskettes. Newly upgraded version **$77.50**
2.1 Kit (#AS216): Same as above but does NOT include 2.0 ROM (for upgrading your old kit) **$47.50**
2.04 ROM Upgrade Kit (#AS314) for A3000 **$45.50**
2.04 A2620/2630 ROM Upgrade Kit **$34.95**

A600/A1200 - FAST RAM PCMCIA Card

Microcard by Microworks Ltd. offers additional megs of FAST RAM via the A600/A1200 PCMCIA slot. This new memory module auto-configures at boot time, leaving most of the internal chip RAM free for image processing. Lowest Prices Anywhere.
2 meg upgrade card **$137.50**
4 meg upgrade card **$219.95**

EXTRACTOR KIT- includes PLCC, Chip Puller, Torx Wrench and special screwdriver $7.49
Baseboard 601 (Expansion Systems) 1MB chip memory card, includes memory $62.50
AdSpeed for A600 by ICD $164.50
Super Denise 8373 Upgrade $29.95
Fatter Agnus (8372A) 1MB with chip puller, Amiga Troubleshooter, "The Final Test" special diagnostic diskette and complete instructions $44.95
AdRAM 540 with 1 Meg/With 2 Megs $119.95/149.95
Flicker Free Video II by ICD $232.50
32K Printer Buffer Chip for Panasonic/Citizen $15.95
Amiga Emergency Startup Kit (Contains most popular chips, etc.) $89.95
A2058 2Mb Amiga RAM board. Expands to 8Mb (includes 2MB) $124.50
Insider II RAM expander for A1000 1.5 MB installed/0K $196.50/$147.50
MegAChip 2000™ —Includes 2MB Agnus chip, chip puller, new Amiga Troubleshooter & "Final Test"diagnostic diskette. Buy the MegaChip and we'll give you the new 8373Super Denise for $25.95 $264.95
KwikStart II 1.3 and 2.0 KickStart ROM switch for A1000 $59.95
A500 Keyboard -New (List Price $109.95)(U.K. Version Available) $37.50
A2000 Keyboard (New) $59.95

VISA MasterCard AMERICAN EXPRESS DISCOVER

3 Chestnut Street • Suffern, NY 10901
Customer Service (914) 368-4242 Fax (914) 357-6243
International Order Line: (914) 357-2424
Order line only 1-800-292-7445

Add UPS charges to above. Prices subject to change.
Hours: 9-6 (ET) M-F
No personal checks over $100.
We ship worldwide 15% Restocking charge.

Circle #122 on Reader Service card.

List of Advertisers

Please use a **FREE** AC Reader Service card to contact **ALL** advertisers who have sparked your interest. Amiga product developers want to hear from you! This is the best way they have of determining the Amiga community's interests and needs. Take a moment now to contact those companies featuring products you want to learn more about. And, if you decide to contact an advertiser directly, please tell them you saw their advertisement in *Amazing Computing*!

Advertiser	Page	Reader Service Number
Blue Ribbon Soundworks, The	CII	104
Centaur Software Development	58	147
Centaur Software Development	59	147
Computer Port	41	101
Commodore Business Machines	13	109
Commodore Business Machines	42	107
Computer Shopping Network	71	121
Creative Computers	88	119
Creative Computers	89	119
Delhpi Noetic Systems	78	*
Devine Computers	79	110
Digital Creations	CIV	108
D.K.B. Software	11	194
Elite Micro Computers	37	102
FairBrothers, Inc.	56	113
Grapevine Group, The	80	122
Great Valley Products	1	105
Great Valley Products	5	106
Great Valley Products	7	112
Great Valley Products	9	123
Great Valley Products	4	124
InSpiral Technologies	70	103
J&C Computer Services	19	165
Memory Management	71	166
Micro R&D	87	118
Micro Systems International	86	114
Oxxi, Inc.	12	160
Signs, Etc. by D. Knox	70	146
SmartSoft	23	115
Vidia	70	190
VisionSoft	71	116
Whitestone	63	148
World of Commodore	CIII	169

*This company prefers to be contacted directly.

Make Your Business Look BIG

With GVP's PhonePAK VFX

Call most large corporations these days and you will probably be greeted with the sound of an authoritative voice saying, "Thank you for calling. If you have a touch-tone phone, please make your selections at any time from the following menu." This technological innovation has saved large businesses time and money in the everyday routine of telephone administration. In the current state of the economy, this can be a significant factor for any company. Now with *PhonePak VFX* and your Amiga, you can emulate the largest corporations and provide better service to your company and staff.

PhonePak VFX is a combination of hardware and software which allows the Amiga to monitor and administrate a telephone line. While a single PhonePak can monitor only one line, a PhonePak can be installed in any available Zorro II slot of an Amiga 2000 or 3000. The capacity of the system is determined by the size of the hard drive.

Each PhonePak can send and accept faxes, create mailboxes for its users, handle telephone screening procedures for each call, record messages separately for each individual on the system, and more. Since multiple PhonePaks may exist on the same Amiga and the same hard drive, PhonePaks can share mailboxes and other features. This allows one mailbox for an individual no matter which line or PhonePak took the call.

LineMan and VFX

PhonePak VFX utilizes two software programs of its own, plus ARexx to connect you to any other ARexx compatible software you require.

LineMan is a memory-efficient, resident program that will monitor your phone line with PhonePak and is fully multitasking. LineMan's job is to administrate the mailbox and fax system you have created using the PhonePak VFX program. This is the program that runs independently and allows you to use your Amiga for other tasks in a multitasking environment

The PhonePak VFX program is an easy to use system for establishing your mailbox system, recording each mailbox announcement, faxing documents, keeping a database of clients, and general telephone maintenance. PhonePak begins with the VFX screen. Through pull-down menus, users create any level of sophisticated or easy system they need. Mailboxes may be added or deleted, assigned individual routing instructions, and more. Each individual mailbox can be configured to provide recorded messages as well as be used to store fax or voice messages. Each mailbox's contents may also be protected by passwords.

Recording messages for each mailbox or menu is extremely easy. The PhonePak uses standard IFF format files which can be imported from other Amiga sound recording hardware or directly from the telephone. PhonePak lets you record and review each message until you are satisfied.

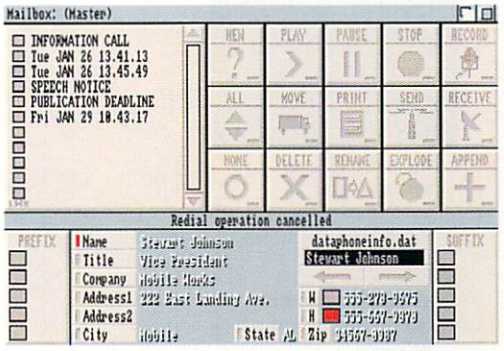
The PhonePak VFX also displays a database of contacts, addresses, and two telephone numbers. PhonePak is capable of an unlimited amount of such databases (one for each interest or need) as well as an unlimited amount of entries. These databases can also supply up to 36 QuickDial numbers, available on a support screen, to place telephone calls directly through PhonePak.

PhonePak VFX includes full ARexx support, this allows the use of other Amiga programs who permit ARexx control. The benefit is that a fully-automated system may be constructed for each individual's or company's needs. By utilizing databases, wordprocessors, and other programs, PhonePak extends itself beyond its normal capabilities and keeps your phone service active without your individual care.

In addition to ARexx support, PhonePak comes complete with an exclusive script language, *Operator*™. Operator is a set of commands and DTMF codes (touch phone tones). Operator allows the use of prefixes and suffixes to the telephone dialing instructions. With Operator, it is possible to create a program that will place calls through a calling card number with all the waits, additional numbers, and responses required. Operator is useful for users who need to customize their calls in order to be compatible with other telephone systems.

FAXES

Faxes are an extremely nice feature on PhonePak. Faxes sent to a PhonePak-equipped Amiga can be accompanied by a voice message which permits the sender to add a short note or mention a particular point of interest in the document. Faxes may also be compressed either normally, MH-type, or using a MR-type compression.



With the PhonePak VFX screen, users make phone calls, send and receive faxes, organize contacts, and more.

Although the MR-type saves considerable transmission time, it is not always understood by every fax machine.

For transmission, PhonePak will access either ASCII characters for input in its own fax layout or allow the import of an IFF file from your own design program to create a more personalized (including logos) style fax. In addition, PhonePak installs a"PPakFax" printer driver in the Amiga's preference drawer that allows users to create and send fax documents directly from other programs as easily as printing.

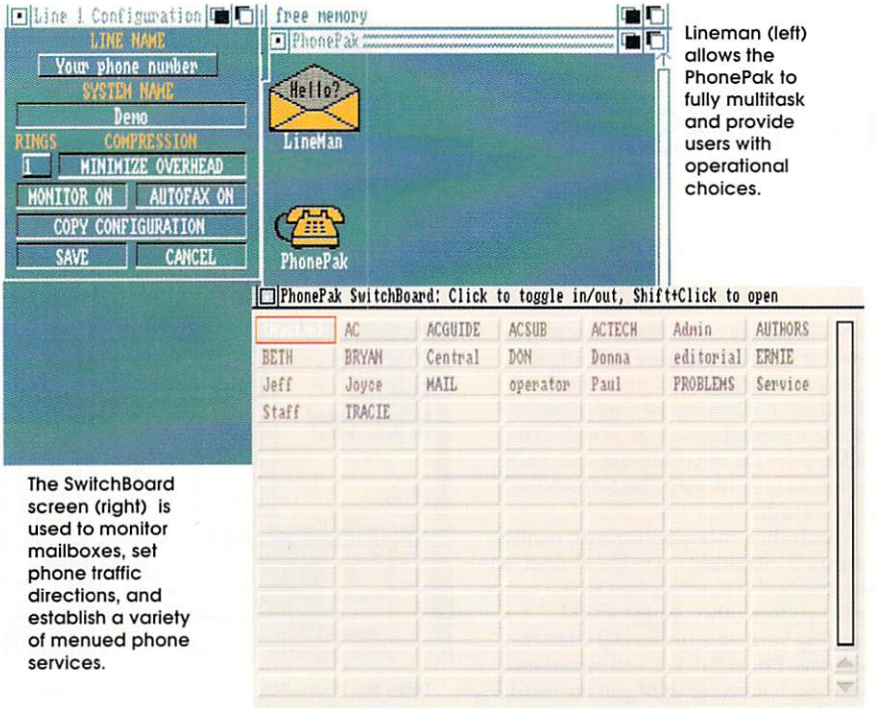
Faxes may either be sent immediately or scheduled for a later (less expensive) time. A fax may also be scheduled for a series transmissions to a variety of phones. This capability allows users to "broadcast" a fax to an entire group.

Since any fax received can be directed to an individual mailbox, it is possible to store faxes in a secured area that is only accessible by the user's password. And a fax can be stored at any level in the mailbox system. This creates the ability to establish separate "fax machines" for every member of a department in an organization.

Further, with the fax available as an IFF, the user can either print to plain paper, using their own printer or even send the fax to other interested parties. It is also possible to utilize an incoming fax image in other Amiga programs.

Hardware Requirements

The PhonePak will work on an Amiga 2000, 3000, or 4000. However, A3000 series machines must have a 512K or more of Zorro II fast memory (per a reference packed in the PhonePak and marked on the carton).



Lineman (left) allows the PhonePak to fully multitask and provide users with operational choices.

The SwitchBoard screen (right) is used to monitor mailboxes, set phone traffic directions, and establish a variety of menued phone services.

PhonePak also requires hard disk space. "Two minutes of uncompressed audio uses a little over one megabyte of storage." per the PhonePak manual. PhonePak recommends a partition of the hard drive just for the mailboxes. If message length has been set at 60 seconds, a 10MB section is enough to hold 18 calls. PhonePak allows the user to establish message length from zero (for use in menu style mailboxes) to 9999 seconds.

The more disk space that is made available to PhonePak, the better your system will perform. PhonePak's ability to store data at its own rate means it is not reliant on high-speed hard disks to function correctly.

Unfortunately, we were not equipped to test PhonePak's Centrex™ call transfer capability. With this feature, PhonePak is able to screen calls and place them to individual extension phones within an organization if that individual's mailbox is marked *in*. PhonePak offers a few extra features to customize the call transfer process to your own needs.

Summary

The PhonePak VFX system has only two possible flaws. These are not flaws of the unit, but with the acceptance of the system. First, voice recorded mail and menus. Although extremely efficient for business and personal use, these systems remain impersonal. Many people become tired of waiting through long narratives of instructions and other comments. PhonePak addresses these questions in its manual by asking users to keep their comments short and direct the caller quickly.

Second, as the use of the fax has increasingly displaced the use of the mail, businesses have come to rely on the fax as a communication tool and a recorder of events. Since the fax on your Amiga is on your hard drive, it will be susceptible to all the whims of fate as is any electronic data. Yet, the ability to print the fax on plain paper or even place the fax into other programs for additional use, should be enough to calm these concerns.

The PhonePak is an extremely efficient piece of hardware. The system sets up quickly and can become as simple or as complicated as needed. During our testing, we found no errors in the function of the hardware or software. The flexibility of the system and its multitasking capability make it a must for small or large companies who want to gain better control of their incoming calls.

As a stand-alone unit for a single user, PhonePak offers unique advantages. From plain paper faxes to client databases and QuickDial features, every business can use at least one of its features.

While voice recording and electronic fax capability are not for everyone, many people deciding on such a system should look closely at the PhonePak VFX. Probably the best feature of the PhonePak is that it is attached to the Amiga. While the PhonePak is monitoring and directing calls, someone still has the ability to write the letters and mail the bills.

•AC•

Great Valley Productsa
600 Clark Avenue
King of Prussia, PA 19406
215-337-8770
FAX 215-337-9922
Inquiry #259

In The Field: PhonePak VFX

CUSTOM VIDEO CREATIONS

Polling Amiga

Ben Emmerich of Custom Video Creations in San Rafael, CA has reported some extraordinary capabilities with his *PhonePak*. Using a combination of hardware, PhonePak, ARexx, and a Centrex™ telephone system, Mr. Emmerich has been able to create a fully automatic telephone polling system.

Callers to the special 800 number are presented with a list of questions and menus. The Amiga, using artificial intelligence, analyzes answers from the respondents and, based on those answers, asks more questions. There is even a spot where the respondent may leave a comment of up to one minute in length.

The end result is entered into a *SuperBase Pro 4* database and collected in a survey. A form is generated in *ProPage* and the answers are applied. The completed form is then faxed to the customer. The recorded comments are also available to the customer by telephoning the system, activating the mailbox, and using the individual code created for each form.

The completed system runs approximately 10 programs in a multitasking environment. The special interface created by CVC was programed with *CanDo*.

The system currently utilizes two PhonePak boards, but Custom Video Creations has decided to expand the system to three boards. In the future, the completed system will handle four boards, but Mr. Emmerich will not be stopped there. He stated that the current plans are to add a second networked Amiga with four PhonePaks to the original system.

While not able to relinquish the name of the customer, Custom Video Creations has been contacted by several other firms requiring similar PhonePak implementations. If you would be interested in Custom Video Creations creating a system for you, contact:

Custom Video Creations
P.O.Box 2208
San Rafael, CA 94912
(415) 454-7162
Inquiry #260

DIVERSIONS

Cyber Empires

by Rick Broida

It's been a long time since a computer game kidnapped me into the small hours of the morning, but with SSI's *Cyber Empires* I was a willing victim. I sat down at about nine o'clock, and the next thing I knew it was 1:30 a.m.

It was worth the lost sleep. Cyber Empires represents the perfect marriage of campaign strategy and arcade action—something I thought no computer game could achieve.

The premise is simple: You're out to conquer the world, and to do it you'll need an army of cybernetic warriors. Naturally, cybernetic warriors don't come cheap, but funding is available by capturing additional territories via your global expansion. Territories provide money; money builds factories; factories produce cyborgs; cyborgs capture more territories.

Simple, save for the fact that your opponents—up to four, human and/or computer—want the same thing. At the outset of the game it's basically a race for unclaimed territories; then you'll sink your hard-plundered funds into factories and the construction of bigger, meaner cyborgs.

While strategic savvy plays a major role in the game, your choice of cyborgs also dictates whether you'll be the conqueror or the conquered. There are nine models, each with different weapons and abilities—and pricetags. The Cyclops, for instance, has impressive armaments for a machine so small and maneuverable, but it won't withstand a lot of punishment in a firefight. The Titan, on the other hand, speaks loudly and carries a big missile-launcher. It can withstand a massive pounding, but it is slow-moving and expensive.

The cyborgs themselves come into play not in the acquisition of unclaimed territories but in the capture—or defense—of occupied ones. Eventually, amidst your plundering of the land, you'll bump into the enemy, or vice versa—and that's when the fun really begins.

Combat is both simple and complex. The goal is for your battalion of cyborgs to annihilate the enemy's battalion of cyborgs. Of course, if you've sent one Cyclops up against four Titans, you'll soon find yourself down a Cyclops. Hence, the best offense is a massively armed offense. Early in the game, confrontations are usually one on one. But later you can expect some nasty skirmishes involving multiple cyborgs and territorial defense systems.

The combat sequences are pure arcade action. The view switches from map to battlefield, your forces at one end and your opponent's at the other. The function keys select which of your cyborgs you'll control and what the remainder of your forces will do. You can guide one cyborg towards the front lines while the others hang back, or order them all to accompany you in a brutal onslaught. If the cyborg under your control is destroyed, you'll automatically be switched to another—or lose the battle, if that was your last one.

Each cyborg model unleashes its own kind of electric death, whether via heavy lasers, neutrino cannons, short-range missiles, or whatever. Each weapon has a unique and appropriately nasty sound effect. The larger cyborgs usually carry two or three different armaments; certain weapons are better suited to destroying the various types of armor worn by other cyborgs.

A few factors keep combat from becoming a monotonous laser-fest. First, there are different types of terrain on which combat will occur; some cyborgs fare better on an icy arctic landscape, whereas some are debilitated on lava-covered volcanic ground. Second, cyborgs can easily overheat, whether from overuse of certain weapons, extensive damage from enemy fire, or the type of terrain. An overheated cyborg is rendered immobile, a sitting duck. Fortunately, they cool quickly, but often an overheated cyborg continues to take a pounding from enemy weapons, and then it's all over. Meters at the bottom of the combat screen show the active cyborg's heat and armor levels. Larger cyborgs have better armor and can sustain many hits. However, the more armor that's lost during battle, the longer it takes for an overheated cyborg to cool.

When the battle is over, it's back to the map for more planning. There, a digitized voice greets you with a comment on your progress.

It is possible to skip the arcade sequences all together. Once you've been informed of an impending battle, you can let the computer decide the outcome. In fact, it is possible to play an entire game of Cyber Empires with no real-time fighting at all, simply by selecting Strategic Campaign instead of Complete Campaign at the initial options menu. There's also Battle Practice for honing your joystick skills.

Other options add even more flavor to the game. When creating the initial parameters for the campaign, you can select the "Fog of War" option for the map. This means that you'll see the enemy only when he's in a territory adjacent to yours. Then the "Spy" option will factor into your global expansion, allowing you to allocate funds to investigate unknown areas. Enhancements can be installed in factories to speed cyborg production and lower costs, but the enhancements themselves are expensive. Light, medium, or

heavy fortifications may be constructed on valuable territories, such as those containing factories. Again, they don't come cheap.

While the extensive array of game options makes Cyber Empires a true pleasure, there are a few functional flaws. First, once you've assigned movements of cyborgs from one territory to another, there's no way to recall what those assignments were. The map needs to show a dotted line or something to indicate who's headed where. Second, the game takes a long time to load from the two floppies (only one drive is required), and it cannot be installed to a hard drive. However, during gameplay it runs quickly, which is indeed more important.

That's it from the complaint department. Cyber Empires gets my vote—combining outstanding graphics, superb sound effects, and addicting gameplay. I'm planning on many more late nights with Cyber Empires.

•AC•

Cyber Empires,
Strategic Simulations, Inc.
675 Almanor Avenue
Sunnyvale, CA 94086
408/737-6800
Inquiry #200

Indiana Jones and the Fate of Atlantis

by Henning Vahlenkamp

First released on the Amiga in Europe and on the PC, *Indiana Jones and the Fate of Atlantis* ($59.95), aka Indy4, is finally available for North American Amiga gamers after a year's delay. You might be wondering if the long wait was worth it. The answer is a resounding yes; Indy4 is undoubtedly one of the best adventures of the year, even though the year is far from over.

Having failed to get the Holy Grail in *Indiana Jones and the Last Crusade* (Indy3), the Nazis are up to their old tricks once again. This time they're searching for the legendary city of Atlantis, hoping to discover its unspeakably powerful secret weapon—the ultimate cause of its demise. Indiana Jones and Sophia Hapgood, his one-time colleague turned psychic Atlantis-hunter, must find the city first and thwart the Nazis' evil plan, ever-watchful of the nasty Nazi agent trailing them.

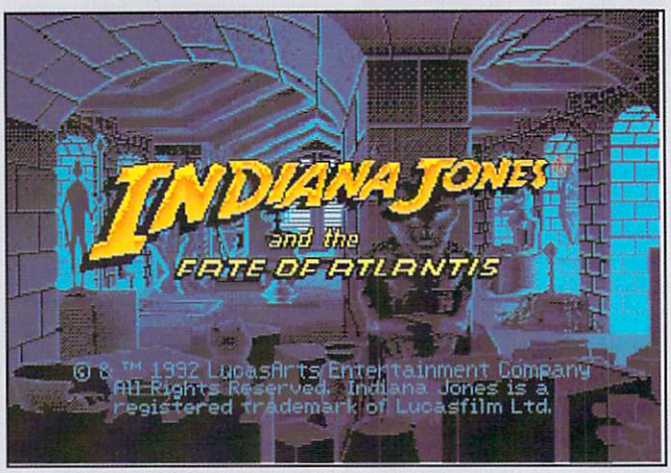
Before you can play the game, you must complete a document protection check. Three increasingly smaller stone disks are shown on the screen—one with a sun symbol, one with a moon, and one with a volcano. You are asked to click on the disks to rotate them into a certain position, and all positions are listed in the manual. If done correctly, you can proceed with the game. This is a clever way to integrate an otherwise tedious procedure into the game, as the disks play a key role in the story anyway.

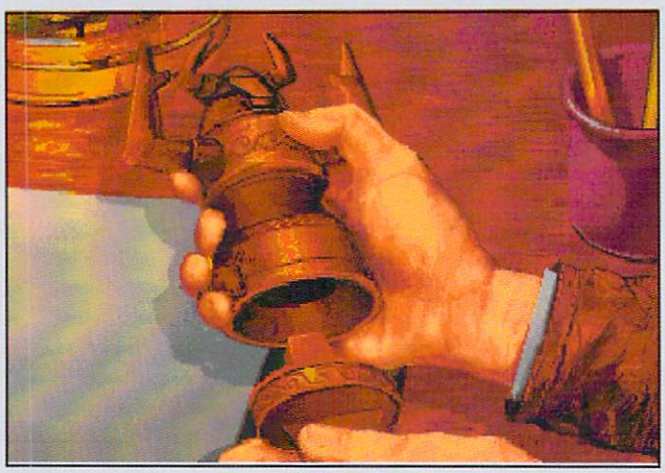
With Indy4, LucasArts introduces an innovation to its game system. Near the start you must find a way into a theater. You can either fight a guard, convince him to let you in, or negotiate a maze to a ladder. The game tunes itself to your choice, emphasizing action, dialog, or strategy. Later on when Indy is back at his office, you can override the game's assumption and select one of the three paths for the remainder of the game. Thus you can play Indy4 three times with new experiences each time. But all paths eventually lead to the same conclusion.

You control Indy4 with the familiar interface used in other LucasArts games. A control panel occupies the bottom of the screen; the left side has a set of nine verbs, and the right illustrates items in your inventory. Click on the screen to move around. Form commands to interact with the game by clicking on verbs and objects. During conversations, select one of five possible responses, including plenty of snappy Indy one-liners. Simple and effective best describe the interface.

Besides graphics adventuring, you also get opportunities at arcade and simulation action, depending upon your chosen game path. Indy4 features a car chase, balloon ride, and submarine voyage, among others. Each scenario has its own interface.

Graphics and sound are impressive. The many detailed 32-color screens complement the game well. Let's hope that LucasArts will bring its better 256-color graphics from the PC to the Amiga now that the AGA machines are available. The iMUSE sound system is sensitive to what you're doing in the game, delivering superb music appropriate to the situation. Even the famous Indiana Jones theme music makes an appearance.





Excellent graphics, sound and animation are combined to create exciting adventure in Indiana Jones and the Fate of Atlantis.

The programmers did another fine job with animation. Character movement is especially intricate and realistic. Plus numerous screens scroll left and right, revealing larger scenes. Animation occasionally becomes slow on unaccelerated Amigas, although not nearly as much as with the newer Sierra games. As usual, there is a number of LucasArts' trademark animated cut scenes, revealing plot developments.

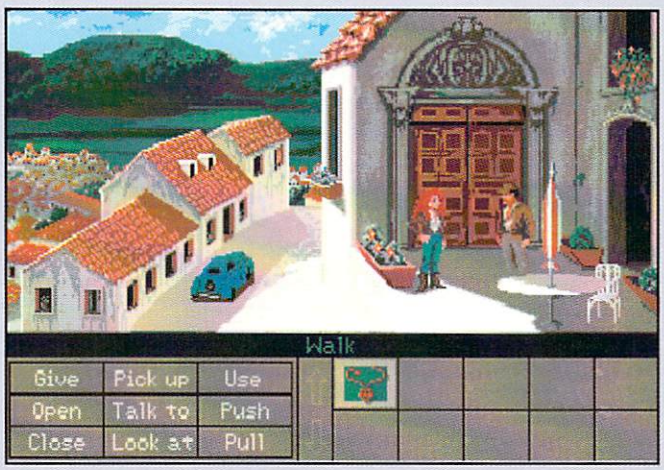
Shipping on an astounding 11 unprotected disks, Indy4 is one of the largest Amiga games ever. As you can imagine, playing from floppies exercises your patience. If you're fortunate enough to have a hard disk, Indy4 will eat up 9MB of storage. In addition to the disks, the package comes with a manual and reference card.

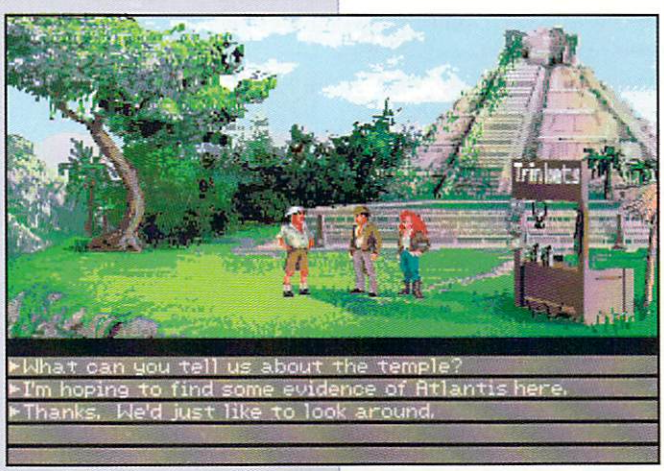
While 1MB RAM is the bare minimum to play Indy4, I found that 1.5MB and up is more realistic, allowing it to store previous scenes. You need at least 2MB to multitask it well. Multitasking Indy4 on unaccelerated machines also tends to slow down the system. Indy4 is compatible with all Amigas and operating systems.

To put it plainly: Indy4 is a thoroughly excellent game and LucasArts' best adventure yet. Indy4 expertly combines action, adventure, and puzzle-solving. The puzzles aren't overly difficult and won't leave you hopelessly stuck, there's little gratuitous violence, and it's very tough for Indy to die. The text is lively, making the story it tells that much more interesting. I wouldn't be surprised if the next Indiana Jones movie is based on this great game!

•AC•

Indiana Jones and the Fate of Atlantis
Lucas Arts
P.O. Box 10307
San Rafael, CA 94912
(800) 782-7927
Inquiry #201





Combat Classics

Rob Hays

Software publishers have recently begun offering boxed sets of programs that are no longer the top sellers they once were. In an industry where the lifespan of a hit game is usually measured in months, this allows the publishers a second chance to recover development and acquisition costs. Empire Software is the latest company to take advantage of this marketing strategy, with *Combat Classics*.

This set includes their own *Team Yankee*, *688 Attack Sub* from Electronic Arts, and *F-15 Strike Eagle II* from Microprose. All three of these are previous best sellers that have been eclipsed by newer games. The oldest one here, 688 was reviewed by R. Bradley Andrews in the August 1990 *Amazing*, and I reviewed Team Yankee in the September 1991 issue. The newest program, F-15, is approximately a year old.

688 is a simulation of the Navy's fast attack class of submarines, whose mission is to locate and destroy enemy submarines and surface ships. They are equipped with some of the best sonar systems in the world, and a plentiful supply of torpedoes and anti-ship missiles. 688 offers you a choice of 10 different missions, playable from either the American or Soviet side, at either beginner or advanced difficulties. Missions range from convoy-escort duty to launching a cruise missile strike. Naturally, the aggressors don't just sit back and let you perform your mission unhindered. You'll have to deal with everything from helicopters to other subs trying to find and sink you.

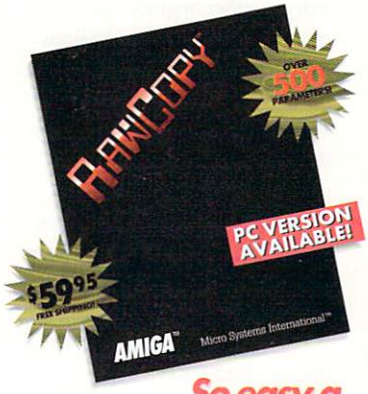
Following what has become the standard for this type of game, you switch between duty stations with the function keys. Track targets from sonar, drive the boat from the control room, load and arm weapons in the torpedo room, and keep track of damage from damage control. There's more, but you get the idea. Each station is loaded from disk the first time you press its key, but remains in memory thereafter, minimizing loading times when playing from floppy. While no longer the king of the hill in submarine simulators, 688 Attack Sub is still playable and guaranteed to keep you busy dodging torpedoes for quite some time.

Team Yankee is based on action in the novel of the same name by Harold Coyle, which details a Superpower confrontation in the former East Germany. As the commander of a company of M1 tanks and other armored vehicles, you have five battle scenarios to work your way through. The unique four-way split screen allows you to keep track of your four platoons with a minimum of information overload. When more detail is needed, you can devote the full screen to any one platoon.

As with 688, the game can be controlled entirely with the mouse, although there are some keyboard shortcuts available. The worst thing about Team

How can you afford to be without RAWCOPY™?

Protect your investment... back up your software!



The New RawCopy...

- Advanced Nibble Features!
- No more wheels!
- No more dongles!
- No more passwords!
- No more look-up charts!

Get rid of these nuisances forever!

So easy a child can do it!

RawCopy™ can back up the most sophisticated protections ever designed.

Micro Systems International is the industry leader specializing in backup utilities. We are worldwide leaders in providing assistance, and backing our products with total support.

For more information, contact Micro Systems International at:

Sales: 1-800-944-3410

Technical Support: 1-313-654-8402

MasterCard VISA

MSI

Micro Systems International
1143 Monroe Street • Carleton, MI 48117

AMIGA™ is a registered trademark of Commodore Amiga, Inc. • Micro Systems International is a subsidiary of Neurowave Enterprises, Inc.

Circle 114 on Reader Service card.

Yankee is the fact that you are limited to the same five scenarios, repeating them as you rise through the ranks. Although the opponents improve with each level, the scenery and objectives remain the same. While games can be paused at any time, there is no provision for saving a battle in progress.

F-15 Strike Eagle II provides you with six different theaters of operation, ranging from Central Europe, to the Persian Gulf, to Vietnam. After choosing a theater and one of four difficulty levels, the computer assigns a primary and secondary target for your mission. You're then placed in the cockpit with a full load of fuel and suitable weapons. The plane's navigation computer provides steering directions to and from your targets, leaving you free to monitor the three displays that will alert you to enemy planes and missiles trying to shoot you down.

F-15 is fast-paced even on a standard A-500, and provides an almost bewildering amount of information to the pilot. The function keys switch views, even allowing a missile's eye view as it closes on the target. Your plane can be controlled with either the mouse, keyboard, or digital joystick, and the control method can be changed at any point.

With any bargain, there is a tendency to ask what the catch is. While there is no real catch here, there are some things you should be aware of. F-15 supposedly supports analog joysticks, but didn't work properly with mine, and any time the key for rear view was pressed, the video display would become garbled and remain so until the game was quit. Also, when played on an A-3000, F-15 registered most keypresses as double presses. This was not a

A-Train

by Jeff James

In the tradition of *SimCity*, Maxis has released *A-Train* ($69.95), a detailed simulation which gives gamers a shot at building a mass-transit empire. Originally published in Japan by Artdink, A-Train was imported (and converted to the IBM PC) by Maxis for American distribution. The Amiga conversion duties were handled by the skilled staff at the Dreamer's Guild, who succeeded at preserving all the intricate complexity of the original for Amiga owners. This complexity stems from having to juggle three disparate tasks in A-Train: building a railroad, managing real estate, and playing the stock market.

Building your railroad into an effective transportation network is your first task. In each of A-Train's six included scenarios, you'll have to lay track, buy trains (nearly two-dozen engine models are available), schedule routes, and shuffle passengers and cargo from station to station. To augment the income derived from shipping passengers and cargo, you can venture into the second aspect of A-Train, which involves purchasing real estate and building structures such as apartments, factories, hotels, and other buildings which can significantly contribute to your income. After making a small fortune with your railroading and real-estate exploits, you can give the stock market a try. Over a score of stock types are available for buying and selling, each with a distinct history. Should you take the safe approach and invest in secure blue chip stocks? Or should you risk everything by buying up the potentially more profitable—yet risky—rapid-growth stocks? Just like in real life, the stock market can be unpredictable, making (or losing) your sim-fortune in mere minutes. To succeed, it's wise to concentrate on building a smoothly-running railroad operation to serve as a bedrock for your empire first. Once your railroad operations are generating a profit, you can then spend more effort on the riskier methods of generating capital.

A-Train is not a game for the timid; you must move fast and act boldly to succeed. Each scenario requires a slightly different strategy, although I did find two "railroading rules" to be helpful in most cases. First of all, getting a train created, on rails, and producing income for you as soon as possible should be your first priority. Secondly, planning your land purchases in



problem when playing on an A-500.

All three games use the manuals for copy protection, which means you can back up the disks if playing from floppies. The included hard disk installation programs insist on doing the installation to drive DH0:. If you have a hard disk but don't want to install these to DH0:, open a shell or CLI before beginning the install programs and type "ASSIGN DH0: YOUR DRIVE VOLUME:", without the quotes, and press return. The Team Yankee installer also expects the program disk to be named "TY." Since it isn't, either *rename* a copy of the disk, or *assign* the name as above. They all run properly under AmigaDos 2.04, but if you have an accelerated Amiga they will not run if you have copied Kickstart into RAM.

If you missed any of these games on their first go-around, here is your chance to fight in the air, on land, and under the sea at a three-for-one price.

•AC•

Combat Classics
ReadySoft, Inc.
30 Wertheim Court, Suite 2
Richmond Hill, Ontario,
Canada
L4B 1B9
(416) 731-4175
Inquiry #203



Circle 118 on Reader Service card.

advance will save you money and avoid headaches. Real estate prices often increase as the game goes on, so buying early will save you lots of cash. A-Train's slick, push-button interface is a joy to use, and the wealth of advisors and informational options (charts, graphs, balance sheets, et cetera) can give you a helpful nudge in the right direction when you're stuck. You'll need that help more often than not, as A-Train can be quite a challenge. Novice gamers would be wise to play the tutorial through several times to get the hang of things. The A-Train manual can also be of assistance, with a well-stocked reference section and an engrossing portion on the history and popularity of railroading.

Maxis recommends dual floppy drives and/or a hard disk when playing A-Train, although it will run—albeit a tad slowly—off one floppy drive. For hard-drive owners, a Commodore-issue installation utility is included for copying program files to your hard disk. AmigaDOS 2.0 and accelerated machines are fully supported, including the new Amiga 1200 and 4000. A-Train ships with two separate versions; a low-resolution (320 X 200) version requiring 1MB of RAM, plus a high-resolution (640 X 400) version which needs at least 1.5MB. Whichever version you use, an accelerated Amiga will speed things along considerably.

The bottom line? From a purely technical standpoint, there isn't much to dislike about A-Train. The interface is slick, the graphics are crisp and the manual is first-rate. Unfortunately, A-Train suffers somewhat in the playability department. Aside from the steep learning curve, A-Train can quickly become tedious: after 15 minutes of play, I suddenly had an urge to jump tracks from A-Train to Microprose's more playable Railroad Tycoon. Maxis' forthcoming A-Train construction kit should alleviate some of the playability problems; until that construction kit becomes available, only the most dedicated of railroading aficionados will have the tenacity to experience all of what A-Train has to offer.

•AC•



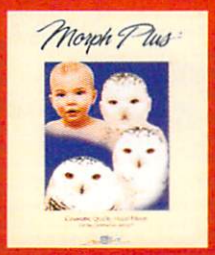
A-Train
Maxis
2 Theatre Square, Suite 230
Orinda, CA 94563-3346
Phone: 1-800-33-MAXIS
Fax: 1-510-253-3736
Inquiry #202

Creative™ COMPUTERS

U.S. ORDERS ONLY:
800-872-8882
CANADA: 1-800-548-2512
4453 Redondo Beach Blvd.,
Lawndale, CA 90260

CUSTOMER SERVICE OR
310-214-0000
ORDER STATUS
Mon-Sat 8-6 PST
FAX: 310-214-0932

Morph Plus . $179.00



With features like 3D wave/ripple effects, completely WYSIWYG perspective and spherical warper, arbitrary rotation, and the best morphing/warping technology around, Morph Plus is the premiere morphing package on the market.

OpalVision Compatible

NEW!!!

Version 2.0 OpalVision

Seeing is Believing



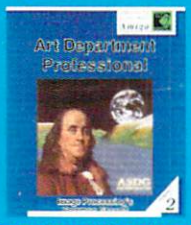
$999.00

Centaur Development™

Upgrade your Amiga 2000 or 3000 to 24-Bit technology.

Perfect for Video & Graphic Applications
Discrete, RGB, 16.8 Million colors
Includes the best 24-Bit paint program - OpalPaint

The Art Department Professional Ver. 2.1

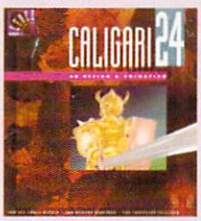


Art Department Pro gives you the most powerful image processing system ever offered for the Amiga. Now with JPEG compression and 24-Bit printing

$159.00

OpalVision Compatible

CALIGARI 24



$279.00

OpalVision Compatible

VIDEO SOLUTIONS

(SOFTWARE AND HARDWARE)

IMAGE PROCESSING SOFTWARE

ART DEPARTMENT PRO. V 2.1	159.00
ART DEPARTMENT CONVERSION PAK	52.95
ASDG TRUE PRINT 24	64.95
CINEMORPH	99.95
IMAGE F/X	249.00
IMAGEMASTER	149.00
IMAGEMASTER FIRECRACKER VER.	139.00
MORPH PLUS	179.00

3D RENDERING/ ANIMATION SOFTWARE

ALADDIN 4D	279.00
ANIMATRIX MODELER	64.95
BROADCAST 3D FONTS - IMAGINE	79.95
BROADCAST 3D FONTS - LIGHTWAVE	79.95
BROADCAST 3D FONTS - MASTER PACK 2 LIGHTWAVE	79.95
BROADCAST 3D FONTS - MASTER PACK 3 LIGHTWAVE	79.95
CALIGARI II	149.00
CALIGARI 24	279.00
CYCLEMAN FOR IMAGINE	39.95
ESSENCE	49.95
IMAGINE 1.1 W/FREE VIDEO	79.95
IMAGINE 2.0	199.00
INTERCHANGE PLUS	64.95
MAP MASTER FOR IMAGINE	45.95
MAP MASTER FOR LIGHTWAVE	64.95
MORPHUS	69.95
MOTION MAN FOR LIGHTWAVE	119.00
PIXEL 3D PROFESSIONAL	149.00
PLAYMATION	279.00
PRO TEXTURES VOL. II	42.95
REAL 3D V1.4	119.00
SCULPT ANIMATE 4-D	299.00
VIRTUAL REALITY STUDIO	64.95

DESKTOP VIDEO

BROADCAST TITLER II	229.00
BROADCAST TITLER II SUPER HIGH RES VERSION	279.00
BROADCAST TITLER II FONT PACK 2	94.95
PRO VIDEO CG II	129.00
SCREEN MAKER 24-BIT	59.95
TEXTURE CITY CD-ROM	119.00
TEXTURE CITY PRO 60	129.00
TOASTER TOOLKIT 1.1	139.00
TOASTER VISION	139.00
VIDEO DIRECTOR	149.00

VIDEO ENHANCEMENT HARDWARE

CHROMA KEY PLUS	359.00
COLOR SPLITTER	109.00
DMI RESOLVER BOARDS	CALL
FIRECRACKER 24/2 MEG	819.00
FLICKER FIXER	249.00
FLICKER FREE VIDEO 2	239.00
OPALVISION 24-BIT MAIN BOARD	999.00
RAMBRANDT 24-BIT VIDEO BOARD	3595.00

GENLOCKS

GVP G-LOCK GENLOCK	399.00
ROCGEN PLUS GENLOCK	329.00
SUPERGEN GENLOCK	629.00
SUPERGEN 2000S	1350.00

EDITING HARDWARE

BCD 2000A:	
-JVC DECKS	799.00
-PANASONIC 7750	799.00
-SONY 9 PIN DECKS	799.00

Wacom Tablet



6" x 9" ... $499.00

This is the best pressure sensitive tablet available! The best selling tablet on the Mac. Also available in 12" x 12" size

Driver and cable* $84.95

*Not required w/OpalVision

OpalVision Compatible

Newtek Video Toaster



Digital Video Effects, Character Generator, 3D Renderer, 24-Bit painting & more!

$1999.00

DCTV From Digital Creations



Full NTSC Color Display and Digitizer.

$379.00

DCTV: A guided tour

This easy-to-follow, comprehensive VHS tutorial will tell you all you need to know about DCTV.

$26.95



Amiga Blowout!!!

- 68030 running at 25Mhz
- Quantum hard disk and built-in SCSI Controller
- Flicker fixer hardware
- 2.04 ROM & ECS
- OpalVision Compatible
- 32-Bit Zorro-II 25Mhz Expansion Bus.

Amiga 3000



Amiga 3000
25Mhz/100mb HD
5mb RAM
$1599.00

Amiga 3000
25Mhz/50mb HD
2mb RAM
$1399.00

Amiga 2000



Amiga 2000C
$649.00

Amiga 2000
Accelerated
25Mhz/25mb/100mb
HD w/controller
$1299.00

Amiga 1200
$599.00

Amiga 1200HD
$849.00!!!

Amiga 1200



Both models include FREE DPaint IV AGA and Final Copy 1.3 from Commodore

GVP®

GREAT VALLEY PRODUCTS

G-Force Accelerators

G-Force 25Mhz/ 1mb/ 68882 $529.00
G-Force 40Mhz/ 4mb/ 68882 $699.00!!!
G-Force 40Mhz/ 4mb/ 68882/ 120mb HD ... $999.00
G-Force 50Mhz/ 4mb/ 68882 .. $1199.00!!!
G-Force 50Mhz/ 4mb/ 68882/ 120mb HD . $1499.00

A2000 G-Force '040 33Mhz/ 4mb/ 68882
High-Speed SCSI Controller and On-board Parallel and Serial Port
All for just $1449.00!!!

A3000 G-Force '040 28Mhz/ 2mb/68882
All for just $999.00!!!

A500 Drives/Accelerators

A500 HD8/ 40mb HD $349.00!!!
A500 HD8/ 80mb HD $419.00
A500 HD8/ 120mb HD $479.00
A530 40Mhz/ 1mb/ 40mb HD $699.00!!!
A530 40Mhz/ 1mb/ 80mb HD $719.00
A530 40Mhz/ 1mb/ 120mb HD $759.00

A500 PC-286 w/512k $109.00

NUCLEUS SINGLE FRAME
CONTROLLER 2.0 369.00
PERSONAL VIDEO DISTRIBUTION AMPLIFIER:
-AMIGA SLOT 139.00
-IBM SLOT 139.00

HOT INTEGRATED VIDEO HARDWARE

DCTV 379.00
DCTV RGB ADAPTOR 249.00
DIGITAL MICRONICS VIVID 24 2795.00
DPS REMOTE CONTROL 279.00
KITCHEN SYNC 1599.00
KITCHEN SYNC S-VIDEO OPTION 119.00
KITCHEN SYNC
GENLOCK OPTION 154.00
OPALVISION 24-BIT
MAIN BOARD 999.00

PERSONAL VECTRASCOPE 789.00
PERSONAL TBC I (REFURBISHED) 479.00
PERSONAL TBC III 869.00
VIDEO TOASTER 2.0 1999.00

FRAMEGRABBER HARDWARE

SPECTRUM 24-BIT FRAMEGRABBER 479.00

GRAPHICS SOFTWARE AND HARDWARE

ANIMATION SOFTWARE

DISNEY ANIMATION STUDIO 49.95
THE DIRECTOR V2.0 74.95
FRACTAL PRO 5.0 CALL
SCENERY ANIMATOR 2.0 59.95
SCENERY ANIM. DATA DISKS:
-GRND CANYON 18.95
-OAHU 18.95
-YOSEMITE 18.95
SURFACE MASTER FOR IMAGINE 25.95
VISTA PROFESSIONAL 2.0 59.95
VISTA PRO 2.0 DATA DISKS:
-CALIFORNIA 29.95
-FLAMING GORGE-DATA 2 29.95
-GRAND CANYON-DATA 1 29.95
-GRAND CANYON-DATA 2 29.95
-JACKSON HOLE- DATA 1 29.95
-MARS SCAPES 29.95
-WESTERN U.S. 29.95

CLIP ART DISKS

PRO FILLS 2 34.95
SOFTCLIPS VOL I CLASSIC 44.95
SOFTCLIPS VOL II PEOPLE 44.95
SOFTCLIPS VOL III COLLECT. 44.95
SOFTCLIPS VOL IV ANIMALS 44.95
VIDEO TOASTER: FLAGS OF THE WORLD ... 52.95

CAD

DYNA CADD CALL
INTROCAD PLUS 64.95
PRO BOARD/NET PACKAGE
VERSION 2.0B NTSC/PAL 289.00

PAINT/DRAW SOFTWARE

ART EXPRESSIONS 169.00
DELUXE PAINT IV V4.1 119.00
DELUXE PAINT IV AGA 139.95
DESIGN WORKS 79.95
IMAGE FINDER 39.95
PROFESSIONAL DRAW 3.0 129.00

PAL SPECIFIC VIDEOSOFTWARE

BROADCAST TITLER II
SUPER HIGH RES PAL 279.00
IMAGINE 2.0 PAL 299.00
VISTA PROFESSIONAL 2.0 PAL 64.95

INTERNATIONAL TOLL FREE ORDERING POLICIES: For Canada, FPO, APO - Minimum order $50. All other countries: minimum order $100. For VISA and Master Card orders you must FAX or mail a signed photocopy of your credit card - front and back. Please have your credit card number ready before calling. INTERNATIONAL PHONE NUMBERS: Orders only please. Canada 1-800-548-2512; Italy 1678-74086; United Kingdom 0800-89-1178; France 19-0590-1099; Australia 0014-800-125-712; Switzerland 046-05-3420. OFFER CODE: P322MG14 Call for all other shipping information. Educational, corporate and aerospace purchase orders accepted. No surcharge for Visa/MasterCard; 4% surcharge for American Express; 1% surcharge for Discover. RETURN POLICY: Call Customer Service at (310) 214-0000 for return authorization. All returns without authorization number (RMA#) will be refused. Returned products must be in original condition and packaging and must be sent back within 30 days of our invoice date. No refunds, please. Defective product exchanges only. We make no guarantees for product performance. Exchanges with unlike products are at our option and subject to a 20% re-stocking fee. CONDITIONS: Prices and availability of product are subject to change without notice. MAIL-IN ORDERS: Send money orders or cashiers check for fastest service. Personal checks - up to 10 days to clear. Include: Name, Address and telephone number (no P.O. Boxes, please). If ordering by credit card include expiration date and billing address. Call for exact shipping rates.



Feedback

Letters to the Editor

edited by Paul L. Larrivée

Fred Fish Readdressed

I'm an avid Amiga user who believes that the machine has great life and potential. This wonderful machine is my prime tool for music composition. I use it also for programming.

One of the many strengths of the Amiga is its large and still quickly growing Freely Distributable Software base. It is on its behalf that I'm writing. I have noticed that in some issues not all Fred Fish disks get published. I think that this is a disservice to your subscribers, given the usefulness of some of these FDS programs. If they don't get published monthly, then they don't get noticed. I understand that you might want to restrict them to two pages, but I think that Fred Fish disks are worth three and even more pages when their numbers exceed two.

Jason Wisniewski
Ann Arbor, MI

*The problem with the Fred Fish listings was addressed in the last issue of "Feedback," wherein we resolved to keep up-to-date with Fred's many new issues.—**PLL***

No Problem, Conrad!

I'd like to respond to comments by Conrad Small concerning AmigaDOS 2.04 ("Feedback," *AC* V8.2). He writes that the Compugraphic Fonts don't work because of an incorrect disk.font library—version 36. It turns out that in order to use these fonts, you must copy the version 37 library from the AmigaFonts2.0 disk to your Libs directory, then reset the system to activate the new library. This library is not the default since it is much larger, requiring you to delete files from the Workbench disk to make room for it. It's mentioned on pages 24-25 of the "Getting Started" booklet and in Appendix D of the manual.

After installing the new library, I tried out the Compugraphic Fonts and found that they do indeed work. I don't understand why Commodore Express acknowedged that there is a problem because there isn't.

I've been using 2.04, which makes 1.3 look amateurish by comparison, since March 1992, and I haven't found any bugs at all. I do hope that this will be of some help to Mr. Small.

Henning Vahlenkamp
Matawan, NJ

Amiga Luminaries

I'd like to respond to the points that Randy Thompson made regarding my review of A-10 Tank Killer Enhanced, which was published in *Amazing Computing* V7.10. Mr. Thompson's letter, titled "A-10 Tank Killer Not Halfbrite," appeared in *AC* V8.1.

First of all, Randy is correct about the game's digitized backdrops being HAM images, not 64-color extra-halfbrite screens. The simulation can run up to 64 colors, while the static non-animated screens are indeed HAM pictures.

Randy's second point concerned the comment I made stating that the game required two floppy drives and/or a hard drive to operate. The game will work with a single floppy drive, albeit slowly. Because of the frequent number of disk swaps and the long loading times associated with using a single floppy system, I would still strongly recommend two floppy drives and/or a hard drive when using A-10 Tank Killer Enhanced. Incidentally, the Amiga system requirements printed on the A-10 game box are also incorrect, stating that the game does require a hard drive and/or two floppies drives to operate.

With regards to Randy's final point—about my neglecting to mention the other programmers of A-10 Tank Killer Enhanced—I did state in my review that the game was "programmed with the assistance of..." Randy Thompson and Rhett Anderson. By mentioning Randy and Rhett, I didn't intend to overlook the commendable efforts of Peter Heinrich and Steve Cordon. Randy and Rhett have been very active in the Amiga community—programming, co-authoring books such as *Mapping the Amiga*, an excellent source published by Compute Books, and serving as regular contributors to *Compute's Amiga Resource*. When I learned that Randy and Rhett were part of the A-10 Tank Killer programming team, I simply thought that the readers of *Amazing Computing* would like to know that such talented and well-known Amiga personalities had contributed to the project.

AC readers may like to know that Rhett Anderson and Randy Thompson, along with Peter Heinrich, also programmed the excellent Amiga port of Dynamix's *Nova 9*, which features HAM images and silky-smooth scrolling.

Jeff James
Fort Collins, CO

*Because of the rush of personal business, Jeff James was unable to respond to Randy Thomson's letter when it was originally published in "Feedback," AC V8.1.—**PLL***

•AC•

Back Issue Index

AMAZING COMPUTING

❦ Vol. 7, No. 2 February, 1992
Highlights Include:
"Deduct That Interest with FC CALC," by Rick Manasa
"Finding the Right Multimedia Fit," by Dave Spitler
"Images in Dentistry," by Ken Larson
"Signmaking on the Amiga, " by Karen Pringle
"Perfect Pages," how to produce PostScript-quality pages without buying a PostScript laser printer.
ALSO: Coverage of Toronto's World of Commodore Show

❦ Vol. 7, No. 3 March, 1992
Highlights Include:
"The Miracle Piano Teaching System," by Christopher Piper
"DeluxePaint IV," by R. Shamms Mortier
"Semi-Automatic Painting and Animation," by Kevin Lude
"Screen Photography," taking pictures of your Amiga screen, by Pat Murphy
Also, a special section on Amiga Graphic Design and a look at some special Amiga Artists.

❦ Vol.7 No. 4 April, 1992
Highlight include:
"Foundation", a review by Dave Spitler
"AdPro 2.0", review by Merrill Callaway
"ATonce Plus", review by Rich Mataka
Also, construct a database using your favorite authoring system, customize your start-up sequence, and create and produce your own video!

❦ Vol. 7 No.5 May, 1992
Highlights Include:
"Pelican Press", a review of this entry-level DTP package by Jeff James
"AdIDE/40 Amiga 500 Hard Drive Kit", review by Merrill Callaway
"Building an Amiga MIDI Interface", super project by John Iovine
Also: AC's annual Desktop Publishing Overview! This issue includes a look at the top DTP packages as well as a study of printers, fonts, and clip art available for the Amiga.

❦ Vol.7 No.6 June 1992
Highlights Include:
"Freeze Frame Video Recorder", review by Merrill Callaway
"HP DeskJet Color 500C", review by Richard Mataka
"MREAD", a programming project by Chuck Wardin
Plus: Don't miss an exciting edition of our ARexx feature by Merrill Callaway or 3-D animation with DPaint IV in "The Video Slot", by Frank McMahon.

❦ Vol.7 No.7 July 1992
Highlights Include:
"Modem Rundown", A comprehensive look at modems for the Amiga
"G-Force 040", a review of GVP's 040 accelerator, by Rich Mataka
"SuperJam," a review of this superb music maker from The Blue Ribbon Soundworks, by John Steiner
"FounDex," a tutorial using Foundation's stacks and scripts, by Dave Spitler
Plus, a look at telecommunications and the Amiga including hardware, software, and services.

❦ Vol. 7 No. 8 August, 1992
Highlights Include:
"Digi-View 4.0", by Matt Drabick
"GVP's Digital Sound Studio", review by Matt Drabick
"3D Effects from 2D Amiga Art", tutorial by Shamms Mortier
Plus:
Super ARexx Column for July!
Video Toaster UpDate featured in The Video Slot!
And Much More!

❦ Vol.7, No.9, September, 1992
Highlights include:
"Professional Calc," review of Gold Disk's premier accounting software by Bill Frazier.
"True Basic 2.0" A review of the latest release of the True BASIC language by Paul Castonguay.
"Developing Desktop Savvy," a special project for your favorite DTP software. Using specialty papers to create brochures and pamphlets, by Pat Kaszychi.
"The Video Slot" This month, learn about the new features of Imagemaster, by Frank McMahon.
Don't miss AC's super game coverage in *Diversions*.

❦ Vol.7, No.10, October 1992
Highlights Include:
"Amiga Warrior," Commodore's newest Amiga is a fighter capable of bringing the best of the Amiga to the American consumer.
"MegagageM's CellPro," a review by Merrill Callaway.
"Multi-colored Text in DPaint III," A tutorial to produce dazzling effects with your text, by George Haasjes.
"Game Creation with AMOS," create your own Amiga game, by Jack Nowicki.

❦ Vol.7, No.11, November 1992
Highlights include:
"Amiga 4000," Commodore creates a bold new direction in Amiga computing with expanded graphic resolutions, modular CPU, and more.
"Progressive 040/2000," a review by Rick Mataka.
"Remap Magic," Learn why this tool is your best bet for making use of your palette.
"Beginning C," Chue Xiong covers some of the basics of the C language.

❦ Vol.7, No.12, December 1992
Highlights Include:
"Polishing Basic Programs," Marianne Gillis shares the secrets of BASIC programming experts.
"Banners," A tutorial on creating banner-length printouts, by Pat Kaszycki.
"Structured Drawing & TueBASIC," paul Castonguay shows how TrueBASIC fully supports any level of hierarchical structure.
Also, complete reviews of Voyager 1.1, PIXOUND, VistaPro 2.0, and OpalVision.

❦ Vol.8, No.1, January1993
Highlights Include:
"Creating a Storyboard in Final Copy," see how to layout your animation storyboard in Final Copy. by R Shamms Mortier.
" A Look at 24-bit Libraries," Shamms Mortier looks at 24-bit libraries.
"Using Laser Disk Players with the Amiga," Rom Battle examines the benefits of laser disks as a source of video images. He also shows an easy way to set them up.
Plus: A complete review of the new A1200 & coverage of Comdex Fall 92 & the FES-London.

❦ Vol.8, No.2, February 1993
Highlights Include:
" Extending the AMOS Sort," Dave Senger looks at the AMOS sort function.
" Business Cards," Soft-Logik's Dan Weiss gives an in-depth tutorial on how to create your own business cards.
"AD1012," a review by Rick Manasa.
AND! A special sneak preview of the One-Stop Music Shop from Blue Ribbon & complete coverage of the WOCA Toronto!

❦ Vol.8, No.3, March 1993
Highlights include:
"Playmation", a review by R. Shamms Mortier
"Rubbing the Lamp", a tutorial on how to get the most out of Alladin 3D by R. Shamms Mortier
"Building your Business Image," How to improve your business looks with DTP, by Dan Weiss.
PLUS: CES Las Vegas 1993!

AC's TECH

❦ AC's TECH, Vol. 1, No. 4
Highlights Include:
"GPIO—LOw-Cost Sequence Control" by Ken Hall
"Programming with the ARexxDB Records Manager" by Benton Jackson
"The Development of a Ray Tracer—Part I" by Bruno Costa
"The Varafire Solution—Build Your Own Variable Rapid-Fire Joystick" by Lee Brewer
"Using Interrupts for Animating Pointers" by Jeff Lavin
—and more!

❦ AC's TECH, Vol. 2, No. 1
Highlights Include:
"Build Your Own SCSI Interface" by Paul Harker
"CAD Application Design—Part III" by Forest Arnold
"Implementing an ARexx Interface in Your C Program" by David Blackwell
"The Amiga and the MIDI Hardware Specification" by James Cook
—and more!

❦ AC's TECH, Vol. 2, No. 2
Highlights Include:
"Programming the Amiga in Assembly Language Part 2", by Forest Arnold
"Implementing an ARexx Interface in Your C Program, Prt 2", by David Blackwell
"Iterated functions Systems for Amiga Computer Graphics", by Laura Morrisson
"MenuScript", creating professional looking menus easily and quickly, by David Ossorio
And Much More!

❦ AC's TECH, Vol. 2, No. 3
Highlights Include:
"HighSpeed Pascal," by Dabid Czaya.
"PCX Graphics," by Gary L. Fait.
"Programming the Amiga's GUI in C—Part 5," by Paul Castonguay,
"CAD Application Design Part 4," by Forest W. Arnold.
And Much More!

❦ AC's TECH, Vol. 2, No. 4
Highlights Include:
"In Search of the Lost Windows," by Phil Burke
"No Mousing Around," hide that annoying mouse pointer with this great program, by Jeff Dickson.
"The Joy of Sets," by Jim Olinger
"Quarterback5.0," a review by Merrill Callaway.

❦ AC's TECH, Vol. 3, No. 1
Highlights Include:
"Comeau Computing's C++," A review of this great new C compiler by Forest Arnold.
"Programming the Amiga in Assembly Language Part 5," by William Nee
"Make Your Own 3D Vegetation," Laura Morrison shows how to use iterated functions to create 3D trees and plants.
PLUS! The HotLinks Developer's Toolkit ON-DISK!

What have you been missing? Have you missed information on how to add ports to your Amiga for under $70, how to work around *DeluxePaint*'s lack of HAM support, how to deal with service bureaus, or how to put your Super 8 films on video tape, along with Amiga graphics? Do you know the differences among the big three DTP programs for the Amiga? Does the ARexx interface still puzzle you? Do you know when it's better to you use the CLI? Would you like to know how to go about publishing a newsletter? Do you take full advantage of your RAMdisk? Have you yet to install an IBM mouse to work with your bridgeboard? Do you know there's an alternative to high-cost word processors? Do you still struggle through your directories?

Or if you're a programmer or technical type, do you understand how to add 512K RAM to your 1MB A500 for a cost of only $30? Or how to program the Amiga's GUI in C? Would you like the instructions for building your own variable rapid-fire joystick or a 246-grayscale SCSI interface for your Amiga? Do you use easy routines for performing floppy access without the aid of the operating system? How much do you really understand about ray tracing? **The answers to these questions and others can be found in *AMAZING COMPUTING* and *AC's TECH*.**

For more information call
1-800-345-3360

The Fred Fish Collection

Below is a listing of the latest additions to the Fred Fish Collection. This expanding library of freely redistributable software is the work of Amiga pioneer and award winning software anthologist, Fred Fish. For a complete list of all AC, AMICUS, and Fred Fish Disks, cataloged and cross-referenced for your convenience, please consult the current ***AC's Guide To The Commodore Amiga*** available at your local Amazing Dealer.

Fred Fish Disk 771

AutoSave A small program which calls an ARexx script at regular inter- vals, controlled through a Workbench window. Although intended to provide an "AutoSave" function for applications, the script can do anything. Includes C source, which demonstrates simple use of GadTools and the timer device. Requires Kickstart 2.0 or later. Author: Michael Warner

BBBBS Baud Bandit Bulletin Board System. Written entirely in ARexx using the commercial terminal program "BaudBandit". Features include up to 99 file libraries with extended filenotes, up to 99 fully threaded message conferences, number of users, files, messages, etc. are only limited by storage space, controlled file library and message conference access for users and sys- ops, interface to extra devices like CD-ROM and others, all treated as read only, complete Email with binary mail and multiple forwarding, user statistics including messages writ- ten, files uploaded or downloaded, time, etc, plus much more. Works under Amiga OS 1.3 and greater, tested through 3.0. This is version 5.7, an update to version 5.5 on disk 729. Includes complete ARexx source. Author: Richard Lee Stockton

PubChange A commodity for AmigaDos 2.04. It isn't a public screen man- ager, but it is useful when used in conjunction with one. It is designed to make public screens easier to use. Whenever a new screen is brought to the front, this screen is examined. If it is a public screen, it is made into the default automat- ically without having to explicitly do it from within a public screen manager. Thus, the current default public screen is always the one which you have most recently brought to the front, and applications which use the default public screen will appear there. Version 1.0, binary only. Author: Steve Koren

PKludge A mode promotion commodity for AmigaDos 3.0. It allows any mode to be promoted to any other mode. Mode promotion keyed from the screen name or title, and resizing and moving screens during mode promotion. It is useful to 1) promote all screens to a single scan rate to avoid re-syncing on multisync moni- tors during screen flipping, 2) use 800x600 or higher resolu- tions with some applications which don't know how to open those screens but can otherwise handle bigger screen sizes, 3) use PAL:Productivity 640x400 mode instead of DblNTSC:High Res Lace mode, since the productivity mode tends to be more visible on some Amiga 4000's. Version 1.0, binary only. Author: Steve Koren

NiceMove Some different examples in C of MOUSEMOVE event handling during high CPU or DMA usage. Version 1.00, first release. Includes source and a sample program. Author: Thies Wellpott

Sing Sing will read a text file (actually ANY file) and try to "sing" the characters in it using internal simple waveforms in 4 voices. Binary only. Author: Richard Lee Stockton

Sound Sound sample player. Will play ANY file as sound. Understands IFF, stereo, and fibronicci compression. Can play direct from disk. Uses only 4k of chip ram. Effects include fade and grow. Works from CLI or WorkBench, all OS thru 3.0. Includes complete C source. Author: Richard Lee Stockton

SourcOpt A little assembly language source optimizer. While most assem- blers have optimization, they optimize the compiled code. One disadvantage of this however, is when debugging code thru a disassembler or monitor, the code you see differs from that you have written because of the optimization. By optimizing the source first, you can eliminate some of these differences. Version 1.0, binary only, CLI usage only. Author: Alexander Fritsch

Fred Fish Disk 772

VMB Demo version of VIDEO MUSIC BOX, a program designed to provide an easy to learn and use facility that non-musicians or begin- ning musicians can use to compose original background music for their Amiga multimedia productions. No prior music com- positional knowledge is required to generate basic musical styles from pre-arranged music pattern templates and chord progressions. Individuals having increased musical backgrounds can use the many included editors to define new chord-types, "revoice" chords, create new chord progressions, perform basic sequence editing, and create additional pattern templates. Supports both MIDI Format 0 and IFF SMUS music file formats for compatibility with all multimedia authoring programs. Version 1.6, second major upgrade to version 1.0 on disk number 660. This new version is AmigaDOS 2 compatible, allows un- limited pattern generation in a single sequence, has improved musical dynamics, and expanded MIDI. Requires 1 Meg. Author: D.T. Strohbeen

Fred Fish Disk 773

Detache A very small and simple utility that will detache a file from the file system. Note that this is completely different than deleting a file. In particular, Detache works even if the file system did not restart properly because of a failed validation. This happens rather frequently if the Amiga crashes during a write on a hard disk partition: you get the dreaded "checksum error on block xxx" requester, and no writes are allowed to the partition. If you know the name of the guilty file (the file the faulty block belongs to) you can simply detache it, and the file system will be happy to restart. Requires OS2.04, binary only. Author: Sebastiano Vigna

Enforcer A tool to monitor illegal memory access for 68020/68851, 68030, and 68040 CPUs. This is a completely new Enforcer from the original idea by Bryce Nesbitt. It contains many new and wonderful features and options and no longer contains any exceptions for specific software. Enforcer can now also be used with CPU or SetCPU FASTROM or most any other MMU-Kick- start-Mapping tool. Major new output options such as local output, stdout, and parallel port. Highly optimized to be as fast as possible. This is version 37.26, containing a bug fix to version 37.25 on disk number 754. Requires V37 of the OS or better and an MMU. Author: Michael Sinz

Ls An update based wholly but loosely to the version 3.1 of Ls on disk number 236 by Justin McCormick. Includes many enhance- ments and bug fixes. Ls is a popular, UNIX style directory lister. This version features intelligent columnar listing, versatile sort options, UNIX-style pattern matching, recursive subdirectory listing, customized output formatting and much more! Version 4.7ljr, requires at least OS 2.04, includes source. Author: Loren J. Rittle.

NewPop An upgrade to the original "POPCLI" by John Toebes. Features include a hotkey CLI (of course!), instant or timed screen blanking, a discreet informative backdrop window in the title- bar region of the WorkBench screen that gives the date, a rough indication of CPU usage and SCSI disk I/O and available memory. Also includes a runtime configuration file. Version 4.0, includes source. Author: Loren J. Rittle

Quest General purpose interactive AREXX question/ answer routine that includes a very funny script ("HackerTest") to rate your "computerese" and hacker ability. Quest can be used for any similiar type question-answer script. The original hackertest was created by Felix Lee, John Hayes and Angela Thomas in Sep- tember 1989. Author: Erik Lundevall

REXXProgs Some good, well-commented, examples of REXX programming. Includes Palette.rexx, an ARexx tutorial on using the rexx- arplib.library to open a window (in this case a color palette) on any public screen and send messages to another ARexx pro- cess. ShoList.rexx, displays system lists (libraries, ports, tasks, etc.) and Sz.rexx, Displays alphabetically sorted directory with filesizes. CLI only. Author: Richard Lee Stockton

Wangle Very addictive "sliding-block" single player strategy game. The object is to group four smaller squares of the same color together in such a way as to form a larger square. Once started in a direction, blocks slide until they hit another block, a wall, or in some cases, fall through the floor! Includes 50 levels and a level editor. Binary only. Author: Peter Händel

Fred Fish Disk 774

ExtraCmds A small set of AmigaDOS commands, chiefly inspired by UNIX, written to augment the collection distributed as part of the System Software Release 2.04 (V37) and will not run under older releases. This is the first public release consisting of the commands Common, Concat, Count, DirTree, Head, Lower, Split, Tee, TimeCom, and Unique. Source code and manual pages in both Danish and English are included. Author: Torsten Poulin

HuntWindows Starting with 2.0 you can make screens bigger than the visual size of your monitor. On a double-size workbench, catching windows like requesters etc. can be quite annoying at times. This little utility hangs itself on the Vertical Blank inter- rupt to find out which window is being activated and moves the screen to show the window in full view. Version 1.4, includes source in assembler. Author: Jörg Bublath

ISpell An "Amigatized" port of a Unix version of a freely distribu- table interactive spelling checker. Two major modes of oper- ation: Original Interactive Mode to allow a user spell check and correct a text document and ARexx Server Mode that allows the end user to hook ISpell up to text editors and other things that need a spell checking service. Regular expression lookup of word patterns is also possible in ARexx Server Mode. Includes Arexx macros for GUISpell (included), CygnusEd, Mg, TurboText, GNU emacs, VLT and WShell. Version 3.3LJR, an update to the version released on disk number 191. Requires AmigaOS 2.04 or later. Includes source. Author: Many! Current version by Loren J. Rittle

SetAslDim A very small and simple 2.04-only utility which lets you set the position and dimensions that the ASL file, font and screen mode requesters will assume as default. It obtains this result by SetFunction()ing the AllocAslRequest() call of the asl.lib- rary. Binary only, CLI usage only. Author: Sebastiano Vigna

SetSystem A very small and simple 2.04-only utility which forces the SYS_UserShell tag on each System() call. This means that every application will use your user shell (for instance, Bill Hawes's WShell) instead of the system shell. Binary only, CLI usage only. Author: Sebastiano Vigna

Fred Fish Disk 775

ICoons A spline based object modeler which can be used to generate objects in TTDDD format. TTDDD files can be converted to lots of different object formats by using the T3DLIB shareware package by Glenn Lewis. Line mode and Flat mode solid render- ing as well as Gouraud and Phong shading. Requires a machine with a floating-point co-processer. Version 1.0, includes source. Author: Helge E. Rasmussen

Fred Fish Disk 776

CopDis An oldie but goodie I found while poking around the net. CopDis is copper list disassembler that can be run from the CLI or linked with and run directly from an application program. Version 34.1, an update to FF261. The code has been cleaned up, some bugs fixed and the ECS instructions added. Includes source. Author: Karl Lehenbauer, enhanced by Sebastiano Vigna

JEdYet another programmer's editor. Lots of features, including: total customization, a powerful programming language, multi- file/multi-view editing, number of windows is only limited by memory, clipboard support (cut/paste on any unit), any window can have any (non-proportional) font, an Arexx interface, and more. Version 2.05, (apparently unrelated to the version of Jed on disk 297). Requires OS2.0 or later, includes source. Author: John Harper

XDME Version 1.54 of Matt's text editor. XDME is a "not-so-simple" WYSIWYG editor designed for programmers. It is not a WYSIWYG word processor in the traditional sense. Features include arbitrary key mapping, FAST scrolling, title-line statistics, multiple windows, and ability to iconify windows. This new version has some bug fixes, many new commands and several other new enhancements. Update to version 1.45 on disk number 530, includes source. Author: Matt Dillon, Enhanced by Aaron Digulla

WFile Small but useful tool to interchange ASCII files between different operating systems. Converts foreign symbols and adapts linefeed codes. Can also be used to expand tabs to multiple spaces or vice versa. It has builtin templates for interchange between Amiga, MS-DOS, OS/2 and UNIX systems. Profiles can be used for common adaptions. The new version contains new templates and the memory management system has been revised and optimized. Version 1.32, an update to version 1.11 on disk 536. Includes source in C. Author: Joerg Fenin

Fred Fish Disk 777

AGAtest Two little programs for the (lucky) owners of AGA machines that show all 2^24 colors on an AGA HAM8 screen without ever chang- ing the 64 base color registers. Includes source. Author: Loren J. Rittle

Chemesthetics Chemesthetics uses the calotte model to draw molecules. It has an Intuition user interface, can save pictures as IFF files and has many example files. The new version lets you raise the task priority for the painting process to get the results faster, shadow and reflection color can now be set to your desires, quicktrans.library is used for even faster painting. Versions for a math coprocessor and utilties to convert data files from Molec3D and to DKBTrace are included. This is ver- sion 2.14, an update to version 2.10 on disk number 574. Includes source in C. Author: Joerg Fenin

IncRev A small program for a makefile or an Imkfile to update a pro- gram's revision number after each successful compile process. This is version 1.10, an update to version 1.03 on disk number 536. Includes source in C. Author: Joerg Fenin

Sizer A small and pure shell utility that gives the size in bytes, blocks, and the total occupied by a directory, device or 'assign'. Accepts multiple arguments. Version 0.36, an update to version 0.20 on disk 741. Now handles control-C and gives more accurate results. French and English docs. Binary only. Author: Gérard Cornu.

Fred Fish Disk 778

DungeonMap A little tool that creates maps of dungeons and towns which can be used by a Dungeon Master (DM's) for use in a Dungeons & Dragons (D&D) game. These maps can be saved, edited, and printed. This is version 1.1, an update to version 1.0 on disk number 603, binary only. Author: Bill Elliot

EgoMouse A little hack that makes the mouse pointer turn towards the direction you move your mouse. A popular program on the Macintosh. Version 1.0, binary only. Author: B.J Lehahn, Pointer designed by F. Küster

Kurve Kurve is yet another function plotting tool which provides a very fast and easy way of plotting and analysing mathematical functions. The integrated function compiler makes this plotter to be the fastest one you've ever seen. Version 2.001, compatible with Kickstart 2.0 and 3.0beta. Includes source in C. Author: Henning Rink

MultiReq A FileRequester library, but it's not simply another file requester library, cause it's the first really multitasking file requester (as far as I know) and above this it also has a great number of other features, that make MultiReq superior to other file requesters. Written entirely in assembler to be small and fast. Version 1.20, binary only, shareware. Author: Andreas Krebs

OmtiFroh A very small "mini-hack" that allows Enforcer to be used with some specific SCSI controllers that don't bind an AutoConfig node into the ExpansionList. Enforcer registers the accesses to the hardware at 0xee0000 as 'hits'. This little gem will create the AutoConfig node for you. Includes source. Author: Henning Schmiedehausen

Fred Fish Disk 779

AAP_AAC Animation playback and convert programs. (AAP and AAC). AAP can show IFF ILBM pictures, show IFF ANIM_5 and IFF_ANIM_7 animations. It can show (long) sequences of animations and/or pictures using a script file and can operate from memory (preload) and/or disk. AAC converts between the supported anim filetypes and/or sequences of pictures. AAP version 1.2, AAC version 1.1. Includes source and a small sample sequence mix of pictures/animation from script file. Author: Wolfgang Hofer

Plasma A Plasma Cloud Generator for V39 AGA machines only. This pro- gram will generate Fractal Images called Plasma Clouds, using the AGA 256 color modes with full use of the 24 bit palette. Includes source. Author: Roger Uzun

RDBInfo Reads the RigidDiskBlock of the unit and device given as argu- ments, then displays the most interesting parts. Version 0.17, Binary only. Author: Gérard Cornu

SANA The official Commodore developer information package for the SANA-II Network Device Drivers. Includes the SANA-II spec, readme files, SANA-II drivers for Commodore's A2065 (Ethernet) and A2060 (ARCNET) boards, docs and includes, and some exam- ples. Release version 1.4, update to version on disk number 673. Author: Commodore-Amiga Networking Group

VPortPatch A very small 2.04-only utility that patches the graphics.lib- rary function MakeVPort() in such a way to avoid an annoying bug that keeps multipalette pictures from being correctly scrolled (multipalette pictures contain the new PCHG chunk which specifies line-by-line palette changes; hundreds of colors can be displayed even in hi-res with multitasking and full system compatibility). Includes source. Author: Sebastiano Vigna

Fred Fish Disk 780

ABackup A powerful backup utility, that may be used both for hard disk backup and for file archiving. Has a full Intuition interface, a "batch" mode, can save/load file selection, handle HD floppies, etc... This is a *MAJOR* update, with support for XPK library, child task for disk write, error recovering when writing to a disk and more. Include both French and English versions. This is version 2.00, an update from version 1.60 on disk 759. Shareware, binary only. Author: Denis Gounelle.

MEM A little memory game where the object is to remember the face of a "thief" you are shown for a variable length of time depending on the level. You are then presented with a screen in which you have to "recreate" the face using various select- ions for eyes, eyebrows, nose and mouth. Version 1.0, binary only. Author: Jason Truong

NickPrefs An enhancement to IPrefs that manages three new preferences, WBPicture allows you to display any IFF picture in the main Workbench window, supplanting the original (and boring ;-)) WBPattern. BusyPointer lets you edit the clock pointer used by programs when they are busy. You may create an animated pointer. Floppy provides the ability to mess with the public fields of trackdisk, that is, the TDPF_NOCLICK flag, step delay and the like. Requires OS2.0, binary only. Author: Nicola Salmoria

RachelRaccoon A set of hand-drawn "Eric-Schwartz-animation-style" pictures of a new cartoon character. The pictures are overscanned hi- res-interlace (704x480) and are provided in 16-color, 8-color, and 4-color flavors so you can use them for Workbench backdrop pictures. The colors are arranged so that at least on Work- bench 2.x you will have standard looking titlebars. Author: Leslie Dietz

Fred Fish Disk 781

PowerSnap A utility that allows you to use the mouse to mark characters anywhere on the screen, and then paste them somewhere else, such as in another CLI or in a string gadget. Checks what font is used in the window you snap from and will look for the position of the characters automatically. Recognizes all non-proportional fonts of up to 24 pixels wide and of any height. Works with AmigaDOS 2.0 in both shell and WorkBench environments. This is version 2.1b, an update to version 2.0 on disk 726. Binary only. Author: Nico Francois

TKEd TKEd is a very comfortable Intuition-based ASCII editor with an english and german user-interface. It can read texts packed with PowerPacker, has user-definable menus, a comfortable AREXX interface with 109 commands, an interface to some errortools for programmers, macros, undo, wordwrap, supports foldings, has an online help mode, and many other features. TKEd is re- entrant and can be made resident. It's Kickstart 1.3/2.04 compatible, supports the new ECS-screenmodes, an application window and checks itself for linkviruses. Version 1.11, an update to version 1.05 on disk 689. Binary only. Author: Tom Kroener

TWA A commodity that remembers the last active window on any screen. If screens are shuffled, the window is automatically re-activated, when that screen is brought to front. Version 1.0, binary only. Author: Matthias Scheler

WBVerlauf Allows the owners of AGA machines to create a nice Copper background for a selectable color, using the whole 16 million color range of the AGA chips. By specifying the color of the first and the last line of the screen, WBVerlauf will make a smooth color change by setting a new color value on every scanline. Requires Kickstart 3.0. Version 1.4, binary only. Author: Christian A. Weber

Fred Fish Disk 782

DFA NOT just another address utility. DFA(ddress) features email support, dialing, different types of printing addresses, full commodity support, application icon, Arexx port, font sensitive windows and can be fully directed by the keyboard. This is version 1.1. Shareware, binary only. Author: Dirk Federlein

TwilightZone A modular screen blanker with a user-friendly control panel. Provides: Selection of blanker module from an expandable list of modules; A 'blank-now' feature by moving the mouse pointer into a corner of the screen; A 'blank-never' option by moving the mouse pointer into a corner of the screen; Adjustable timeout, and selectable wakeup events. Version 1.1/2.0, binary only. Author: Rainer Koppler

ValCon Converts a value from one number notation system to another. Currently the decimal, hexadecimal, binary and octal systems are supported. Version 1.10, freeware, binary only. Author: Chris Vandierendonck

Yak 'Yet Another Kommodity". Features a sunmouse that only acti- vates when mouse stops, KeyActivate windows, Click windows to front or back, Cycle screens with mouse, Mouse and Screen blanking, Close/Zip/Shrink/Enlarge windows with programmable hotkeys, Activate Workbench by hotkey (to get at menus when WB obscured), Pop up a palette on front screen, Insert date (in various formats), KeyClick with adjustable volume, Pop- Command key for starting a command (like PopCLI), Gadtools interface. All settings accessible from Workbench tooltypes. Version 1.2, an update to version 1.0 on disk number 753, has some new features and several bug fixes. Includes source. Author: Martin W. Scott

Fred Fish Disk 783

APipe An 'Amiga pipe' device. If opened for read, it will run the file name as an Amiga CLI command, with the output going to the opening process. If opened for output, it will run the file name as an Amiga CLI command, with output to the opened file sent to the command as input. Version 37.4, an update to version 37.2 on disk number 601. Author: Per Bojsen

DiskInfo A program like the AmigaDOS 'Info' command, but it gives more extensive information on the disk (volume) and/or on the device requested. Version 1.00, freeware, binary only. Author: Chris Vandierendonck

Hackdisk A complete replacement for trackdisk.device minus support for 5.25 inch and 150RPM floppies. It offers a verify option and is faster than trackdisk 2.0. Hackdisk is supplied as a Rom- Tag module and may be RamKick'ed or placed directly in the Kickstart ROM. Free for non-commercial use, assembly source included. This is version 1.12, an update to version 1.10 on disk number 697. Author: Dan Babcock

KingFisher A specialized database tool providing maintenance and search capabilities for the descriptions of disks in the format used by this library. KingFisher's database can span multiple (floppy) disk volumes, can be edited by text editors that support long text lines, can add disks directly from unedited email or usenet announcements, can remove disks, rebuild a damaged index, find next or previous software versions, print or export (parts of) the database, and more. Includes a data- base of disks 1-770. This is version 1.11. Binary only. Author: Udo Schuermann

Fred Fish Disk 784

BindNames A solution to the problem of having to continually edit your startup-sequence to add assignments for logical variables when you add a new program. BindNames will read one or more files in a special directory and then create all the logical assignments at once and it can figure out dependencies, so it doesn't matter how you order the entries in the file(s). It will create directories that it can't find, such as RAM:Env and RAM:T and will generate warnings for assignments that it can't resolve. Version 1.0, includes source, public domain. Author: Dave Haynie

DirKing A very powerful replacement for the AmigaDOS 'List' and 'Dir' commands. It gives full control on the format of the directory listing and what information should be printed. The directory can be sorted on any field, or on several fields in the order you want. Supports many filters, such as name and date, and the filters can be made effective on files only, directories only or on both. You can also define a pattern for each level of the directory tree. Has an LFORMAT option which is useful for generating scripts. A unique feature is the ability to monitor the scanning process. English version supplied, German, French and Dutch versions available from the author. Version 2.10, shareware, binary only. Author: Chris Vandierendonck

Lyapunovia A mindboggingly colorful program that makes pictures from a simple mathematical formula. (And it's NOT Mandelbrot!) Lyapunovia pictures vary from colorful candy to mean metal (or something), offering you everything you ever wanted in visual representation of abstract nothings... This freely redistributable version of Lyapunovia has been thoroughly tested to work on all Amigas. Special registered versions with precision-extension, optimized for bigger CPUs, and support of WB 2.0/2.1 and WB 3.0 displaymodes (all 256 colors) are available. Version 1.0, binary only. Author: Jesper Juul

Fred Fish Disk 785

FileStorage Small demo of a file librarian, a database for files. The database exists as a number of index files and disks where FileStorage puts your collection of files. FileStorage 'remembers' how many free bytes each storage disk has and tries to fill the disks to the maximum. For each file you can add a 320 character long description and set 16 different (user definable) filetypes. Searching / adding / deleting / changing it's all there! Version 1.2, binary only. Author: Joep Grooten

RomCon Converts a decimal value into a value represented by roman numbers. You can convert from decimal to roman or from roman to decimal. E.g. '1992' equals 'MCMXCII'. Version 1.10, freeware, binary only. Author: Chris Vandierendonck

ScrnTst A program to reveal small irregularities in the beam sweep of computer monitors. Uses the MOIRE effect to render such defects more readily observable. A short program which should be compatible with OS 1.3 as well as releae 2.0. Version 2.0, binary only. Author: William Barish

SeePix Based on Olaf Barthel's 'LoadImage v1.11". SeePix is an IFF viewer/printer, featuring the ability to modify the colors of a pic for printing, allowing for truer colors in the printout (i.e. Blue prints Blue, not Purple), without modifying the pic itself. SeePix features an ARP interface, Iconization and the PathMaster File Selector. Manx AZTEC 'C' Source included. Author: Hank Schafer

Showgerb A Gerber display program. Gerber plotfiles are generated by several CAD packages. This program will display them on an Amiga using 1.3 and probably 2.xx and 3.xx. Source is not included but can be requested from the Author. Includes several sample plotfiles. Version 1.00, binary only, shareware. Author: Paul Gill

Timing A program to clock the time between two events. You can use several names, enabling the timing of different events. Useful mainly in scripts though other uses are possible. Timing can give the elapsed time in ticks, seconds or in the normal hh:mm: ss format. Version 1.21, freeware, binary only. Author: Chris Vandierendonck

UCD A utility for changing the current directory. It scans a disk and builds a file containing information about the directory structure that makes it possible for UCD to change directory to any directory in the scanned volume by simply naming the directory without pathname information. UCD can keep track of the directory structure of multiple volumes. Now supports wildcards. Version 1.15, an update to version 1.0 on disk 734. Binary only, shareware. Author: Uffe Holst Christiansen

YAPS 'Yet Another Public Screen Manager". Using YAPS, you can open Public Screens in ALL(!) Amiga-DisplayModes, even in the new A4000/ A1200 Modes. Requires OS 2.04 (V37+), works even under OS 3.0 (V39+). Binary only. Author: Kartheinz Klingbeil (CEKASOFT)

Fred Fish Disk 786

Hyper Will lead you through documents that are written to be used with the legendary 'Am*gaGu*de' from Commodore. An ARexx port gives access to it from other applications. Requires OS 2.x. Version 1.15a, an update to version 1.00 on disk number 739. Shareware, binary only. Author: Bernd (Koessi) Koesling

IconAuthorDemo A replacement for IconEdit2.0. It can transform IFF images or brushes into resized 2-BitPlane brushes or icon files that match the WorkBench2.0 colors. Online help is available via 'Hyper'. Demo version limited to processing provided demo image only. Requires OS 2.x. Version 1.06, an update to version 1.00 on disk number 739. Shareware, binary only. Author: Bernd (Koessi) Koesling

Macro A small utility that records a sequence of keypresses that can be recalled at any time. Handy for 'on the fly' recording because of its simplicity. (Doesn't need a window, doesn't use the functions keys, so it won't interfere with other uses of them, etc.) Version 1.0, includes source. Author: Piero Filippin

RSM An ARexx compatible serial port manager. Run your serial port from other programs! Version 1.42, C source included. Author: Ron M. Battle

VirusZ A virus detector that recognizes over 500 bootblocks (196 boot viruses) and over 70 file viruses. The filechecker can also decrunch files for testing. The memory checker removes all known viruses from memory without 'Guru Meditation' and checks memory for viruses regularly. VirusZ has easy to use intuitionized menus including keycuts for both beginners and experienced users. The totally new bootblock lab offers all important bootblock operations on one screen. VirusZ performs a self-test on every startup to prevent link virus infection. Written entirely in assembly language and operates with Kick- start 1.2/1.3, OS 2.0 and OS 3.0. Version 2.27, binary only, shareware. Author: Georg Hörmann

Fred Fish Disk 787

ApplSizer An AppIcon utility to size disks, directories or files. Gives the size in bytes, blocks and the total occupied. Requires KickStart 37.175 or higher. French and English documentation. Version 0.20, binary only. Author: Gérard Cornu.

GetSC Gets the colourmap of a single specified or all available screens. The colour values are given in hexadecimal format. GetSC is also the perfect tool to compile a collection of colourmaps for use by the SetSC program. Version 2.00, shareware, binary only. Author: Chris Vandierendonck

MakeInfo A modified GNU makeinfo that allows you to easily create a AmigaGuide(R) hypertext file from a TexInfo .tex file. in addition to the usual plain ASCII file and a TeX .dvi files. This version fixes two nasty bugs: makeinfo working on 68030 machines only, and amiga.tex not handling correctly all foreign characters. Version 1.49b, includes source. Author: FSF, amiga enhancements by Reinhard Spisser and Sebastiano Vigna

RIVer Many programs contain in their binary code an embedded version ID, which is used by the AmigaDOS command 'Version'. RIVer is not a replacement for this command, but rather an extension. RIVer enables you to add this embedded version ID as a comment, or to print it in a table where each field of the ID is clear- ly printed. Version 2.00, freeware, binary only. Author: Chris Vandierendonck

Scale Plays 1-4 simultaneous musical scales on the Amiga's 4 sound channels, using Rob Peck's AudioTools package. Six octave range, ascending/descending, multiple steps, several different speeds of playing simultaneous scales, overall tempo control- ler. Intuition interface. Includes source. Author: Dick Taylor

SetSC Allows you to change or remap the colours of a screen. SetSC gets the colourmap from a file by using the map's name, from the Workbench screen or directly from the command line. SetSC is very useful in scripts, where you can change the screen colours one or more times during script execution. Version 2.10, shareware, binary only. Author: Chris Vandierendonck

SpartanThe sources to the Spartan PD scsi interface driver for Amiga 500 and Amiga 1000 originally by Paul Harker. This is an enhanced version that includes a major bugfix and * SCSI-Direct support. Versions 34.3 (generic) and 34.4 (true SCSI). Author: Several, see documentation

ViewtekA feature packed Picture/Animation Viewer. Shows most ILBM's (including 24-bit ILBM's), most Compuserve GIF format images, most JFIF format JPEG images and most ANIM Op-5 format ani- mations, with support for different palettes for each frame. Supports SHAM, CTBL, and PCHG images, full support of ECS/AGA display modes (ie. show 256 color GIF's directly, show 800x600 HAM animations, etc.). Supports viewing contents of clipboard. Iconifies to a Workbench AppIcon. Includes a version written for GVP's Impact Vision 24, to support true 24-bit display. Version 1.02, requires Workbench 2.04+, binary only. Author: Thomas Krehbiel

Yacht The famous 5 dice game revised for the Amiga features contin- ually updated onscreen scorepad which displays all possible scores after each roll. Another feature is the player con-trolled dice roll - hit the STOP ROLL gadget when you feel lucky! Version 1.1, binary only. Author: Richard Gallagher

Fred Fish Disk 788

Cheats Have an old game that you got frustrated with and put away? Get hopelessly lost in an adventure game maze? Get to level 218 of your favorite game when your cocker spaniel mistook your scrap of paper listing entry level codes for his favorite sock? Well there might be something in this huge list of game solutions, hints and tips that you can use! Author: Many! see individual listings.

MatchPlay A small CLI program that enables experimenting with AmigaDOS pattern matching. It's the best way to learn how to use and interpret those patterns. You give a pattern and a string as arguments and the program determines if the pattern would have matched the string. Requires OS2.x, version 1.00, binary only. Author: Chris Vandierendonck

MouseAideDEMO A DEMO version of a 'Mouse' utility which has all the standard functions: Mouse Acceleration with threshold, window and screen manipulation by mouse and keyboard, mouse and screen blanking, SUN (auto-activation) mouse, user definable 'hot key' command, Keyboard 'String' macros, etc... But also has functions other 'Mouse' programs do NOT, such as: Shell-Cycling, Key Clicking, KeyClosing, Multi-Icon-Select with Mouse, Middle Mouse Button Windowing, EZ-Date generation, Mouse Port switching, Workbench to the front function, Freezing Mouse & Keyboard of all input, etc... Now more 2.0x friendly then older versions, including the ability to fuction correctly in 'Super-HiRes' screen mode! Written in 100% assembly language for efficiency in size and CPU usage. Version v7.12a, an update to version v5.02a on disk 711, Shareware, Binary only. Author: Thomas J. Czarnecki

NPD A little utility to convert NoisePacker 2.xx modules to Pro- Tracker format. Works on 1.3/ 2.0/3.0. Version 2.40, binary only. Author: Nils Corneliusen

NTSC&PALTwo small command line utilities to switch back and forth be- tween NTSC and PAL display modes. Should work on any machine with a 'Fatter Agnus' or better. Binary only. Author: Paul O'Flynn

QC A small CLI command that returns information about the current shell. Such as: the shell/cli process number, the prompt used, the current directory, the default stack size, the current FAILAT level, the DOS error that occurred with the last command run, the return code of the last command, and more. Version 1.10, freeware, binary only. Author: Chris Vandierendonck

Fred Fish Disk 789

MakeDMake An automated DMake file generator. You give it the names of all the C-files used to produce your executable (except #include'd .c or .h files), and it will automatically scan them to find all dependencies, and produce a ready to use (in many cases) DMakeFile calling DCC with options you will need for normal compilation and linking. Version 0.15, includes source. Author: Piotr Obminski, from original code by Tim McGrath

PongoDemo Demo version of PONGO 1.1, a 3D dynamic modeling program that loads, animates and transforms 3D objects in many different ways. This demo version only supports the IFF ANIM5 file format for animations, with the 'Save Imagine object' feature disabled. Supports the following types of morphing: Transcale, Taper, Shear, Rotate, Twist, Bend, Waves, Radial Bend and Metamorph. All transformations may be combined (i.e. you might both Twist and Shear an object at the same time). Requires 1 MB ram, and a PAL Amiga (does NOT run on NTSC computers). Author: Guido Quaroni, submitted by AMIGABYTE

QMouse An unusually small and feature-packed 'mouse utility". Was inspired by, but not derived from, the original QMouse by Lyman Epp. Features include automatic window activation (like WindX), top-line blanking for A3000/A2320 users, system- friendly mouse blanking, mouse acceleration/threshold, 'Pop- CLI", click-to-front/back, 'SunMouse", 'NoClick", 'WildStar", Northgate key remapping, and more. Requires Kickstart 2.0, but is not a commodity. Only 3K. Version 2.21, an update to version 2.20 on disk 731. Public domain, assembly source included. Author: Dan Babcock

Fred Fish Disk 790

UChessA powerful version of the program GnuChess version 4 for the Amiga. Plays a very strong game of chess. Code has been re-written and data structures re-organized for optimal efficiency on 32 bit 68020 and better Amiga systems. Fully multitasking, automatically detects and supports 640X480X256 color AGA mode machines, and does not at any time BUSY wait. Requires a 68020 /030/040 based Amiga computer system with AmigaOS 2.04 or later and 4 Meg of ram minimum. Special 'L' version optimized for 68040 and requires 10 Meg of ram minimum. Supports a variety of standard features such as load, save, edit board, autoplay, swap sides, force move, undo, time limits, hints, show think- ing, and a supervisor mode that will allow two humans to play with the computer acting as a 'supervisor". Version 2.04, includes source. Author: FSF, Amiga Port by Roger Uzun

Fred Fish Disk 791

HSV A small color palette utility that contains both RGB and HSV sliders for adjusting your screens colors. If the screen has 4 bitplanes or less, you can also save the palette to 'ENVARC: palette.prefs'. Requires AmigaOS2.xx, version 0.99, includes source. Author: Frank Ederveen

RADBack A shareware utility that can make a backup of a RAD disk to a normal 880K Amiga disk, regardless of its length - bigger RADs are saved on more disks. Can be started from the Workbench as well as from CLI. Version 1.0, binary only. Author: Sandi Tomsic

Replex REPLace EXecutable. This handy patch substitutes program names that are about to be executed, e.g. if an icon default tool specifies ":c/MuchMore" and you prefer to use "c:TextRead", you can have it defined as such, so you never have to change the icon. Intuition interface allows up to 8 such definitions. Compatible with all known OS versions. This is version 1.0, binary only. Author: Ekke Verheul

ScsiTape A Scsi-Direct tape handler that implements fully asynchronous double-buffered read and write operations. If you have disk / tape drives which support reselection then the handler will be able to operate on the tape concurrently with disk accesses meaning that an archiver such as Tar will not 'freeze' while tape operations are in progress. Includes source. Author: Matthew Dillon

SKsh A Unix ksh like shell for the Amiga. Some of its features include command substitution, shell functions, aliases, local variables, emacs and vi style editing, I/O redirection, pipes, Unix wildcards, a large variety of commands, and coexistence with scripts from other shells. Well documented. Version 2.1, an update to version 2.0 on disk 672. New features in version 2.1 include true piping between internal and external commands, background functions, aliases, and other shell constructs, enforcer clean, several new commands, cross filesystem file and directory moves, and more. Binary only. Requires Amiga Dos 2.04. Author: Steve Koren

Fred Fish Disk 792

AmigaBase A hierachical, programmable, in-core database. Features include two display methods, filter datasets, search datasets, print datasets, and many more. Nearly everything can be real- ized by programming AmigaBase. Datatypes can be Integer, Real, Boolean, String, Memo (Text), Date and Time. Number of data-sets is only limited by available memory. Lacking documenta- tion, (available with shareware submission) but full Intuition interface make many operations quite obvious. Also includes some example projects. Runs under OS 1.3 and 2.0, shareware, binary only. Author: Steffen Gutmann

DragIt Allows you to move or size a window without having to use the drag bar or sizing gadget. Press on the configurable quali- fier, while holding it, press your selected mouse button, and move the mouse. You'll see the window border appear, and you'll be able to drag or size it. Requires OS 2.0, supports localization with locale.library and the new style 2.1 (or 3.0) preference. Version 2.01, binary only. Author: Steve Lemieux

ModHPLJD A Rexx program that creates a modified version of the HP_Laser Jet driver. The modification changes the 'initialize' string so that the font chosen from the printer menu (rather than 12pt Courier) can be used and the number of lines per inch can be specified. Version 1.01. Author: Michael Tanzer

TClass An "Intelligent" file identifier. Has the ability to "learn" new types of files by simply scanning groups of known types of files, and checking the first 20 bytes for similiarities. It then reports on the matching accuracy and adds a "definition" for the filetype to a brain file. Version 2.9, binary only. Author: Sam Hulick

WBPat Creates random 3D patterns for your 2.04 WorkBench windows. A pattern can be shifted or changed, tested, used and saved. Version 1.0, includes source in C. Author: Ekke Verheul

Fred Fish Disk 793

DateCheck A Rexx program that validates the system date by comparing it to the date stored when DateCheck was last executed. If the system date is earlier or too much later than the stored date, the user is notified by a requester. Version 1.01. Author: Michael Tanzer

ReflexFinal A game which tests your addition, subtraction, division, mul- tiplication, percentage, and algebra skills. The goal is to answer several math questions in the shortest possible time. A continuation to "ReflexTest" on disk number 751. Binary only. Author: Jason Lowe

Snap A tool for clipping text or graphics from the screen, using the clipboard device. Snap finds out character coordinates automatically, handles different fonts, keymaps, accented characters, and more. Version 1.63, contains a small bug fix to version 1.62 on disk number 524. Includes source. Author: Mikael Karlsson

SOUNDEffect Sound sample editing program. Special features include: temporary buffers, frequency and amplitude modulation (tremolo and vibrato), echo, special reverb effect, chorus effect, mixer, free hand editing, low and high pass filter, compresser, expander, limiter, distortion and all usual functions (copy, paste, insert, cut, looping, zooming etc.). Version 1.30, shareware, binary only. Author: Sven Bühling

Fred Fish Disk 794

MCAnim A special animplayer. Plays LORES 4-plane ANIM5 anims in a HIRES-LACE screen. The result is a FULLspeed, small (1/4) animation with a high resolution. The anim can be placed anywhere on the screen. One of nine copperlists can be added in one register without loss of speed. Version 0.8, binary only. Author: Ekke Verheul

ReqTools A standard Amiga shared runtime library which makes it a lot quicker and easier to build standard requesters into your pro- grams. Designed with CBM's style guidelines in mind, so that the resulting requesters have the look and feel of AmigaDOS 2.0. Version 2.1a, lots of enhancements since release 1.0d on disk 623. Includes a demo and glue/demo sources. Author: Nico Francois

Fred Fish Disk 795

PSTools Part 1 of a two part distribution of DVIPS ported from a Unix environment. DVIPS is a program that takes TeX .DVI files and converts them to PostScript files. If you don't have access to a PostScript printer, you can still take advantage of the vast amount of useful documentation in TeX .dvi or PostScript .ps format using the incredibly excellent POST program from FF669. This portion of the distribution contains the DVIPS binary, source and config files; DVIPS documentation; the Adobe Font Metric Files, TeX vf font files and LaTeX files. Part 2 of the distribution can be found on disk number 796. Includes DICE C-source. Author: Originally from DECUS, Amiga port by Jonathan Hudson

UnDelete Restores deleted files and (empty) directories with a fast deleted-file-find routine. It is often as fast as "delete". Works on all OFS and FFS disk devices, but from Shell only. Version 1.02, binary only. Author: Ekke Verheul

Fred Fish Disk 796

PSTools Part 2 of a two part distribution of DVIPS ported from a Unix environment. DVIPS is a program that takes TeX .DVI files and converts them to PostScript files. If you don't have access to a PostScript printer, you can still take advantage of the vast amount of useful documentation in TeX .dvi or PostScript .ps format using the incredibly excellent POST program from FF669. This portion of the distribution contains the TeX pk font files and the TeX tfm font files. Part 1 of the distribution can be found on disk number 795. Author: Originally from DECUS, Amiga port by Jonathan Hudson

Fred Fish Disk 797

A2ps Another "oldie but goodie" I found poking around the net. This seemed like an appropriate place to put it. A2Ps formats an ascii file for printing on a postscript printer, adds borders, headers etc. Lots of command line options. Includes source. Author: Miguel Santana, amiga port by Daniel Barrett

BBBF The Bootblock.library/brainfile is an attempt to make life a little bit easier for programmers of anti-virus utilities, diskcopy programs, directory utilities, disk packers and for whoever who wants to check the bootblock of some device The library has some easy-to-use functions to read the brain- file, and to check a bootblock with it. Version 0.95 beta, brainfile recognizes 158 different viruses. Includes sample source. Author: Johan Eliasson, SHI member.

BIGMec A shareware utility that displays the current available amount of memory, the memory available when BIGMec was started and the difference between those. The amounts can be displayed in HEX/ DEC and BYTE/KILO/MEGA. BIGMec can be started from Workbench as well as from CLI. Version 1.0, binary only. Author: Sandi Tomsic

DVI2LJ A cli utility to convert TeX .DVI files into HP PCL files suitable for printing on the HP Laser Jet series printers. Author: Gustaf Neumann, amiga port by Daniel Barrett

HP3ps An intuitionized utility for changing modes on a Pacific Page Postscript Emulation cartridge. Allows you to select HP-PCL or POSTSCRIPT mode by simply clicking on a gadget. Version 92.02.09, binary only. Author: Scott Dhomas Trenn

PSUtils Some cli utilities for the manipulation of PostScript files. Includes: psbook - rearranges pages into signatures; psnup - uses pstops to merge multiple pages per sheet; psselect - selects pages and page ranges; pstops - performs general page rearrangement and selection; and epsffit - fits an EPSF file to a given bounding box. Includes source. Author: Angus Duggan, amiga port by Jonathan Hudson

Spots A useless but pretty 24-bit-RGB and HAM spot-paint-program. Handles scripts to render animations. It needs arp.library or WorkBench 2.0. Check out the examples to see if you like the effect. Version 1.10, binary only. Author: Ekke Verheul

Fred Fish Disk 798

AddressitDEMODemo version of a very powerful small business and personal mail manager that includes many extras. You can define up to 15 flags, export data to ProWrite and Wordperfect, and print rosters, mailing lists, labels, envelopes plus a whole lot more. Works with 1.2/1.3 and 2.0. Author: Legendary Design Technologies Inc.

ASwarmII A "high security" Screenblanker commodity (will not burn-in the phosphor even when the CPU is really busy). Based loosely upon Jeff Buterworth's "xswarm" for X11 Windowing System, it shows from 1-10 "wasps" beeing chased by 1-500 "bees". Screen will blank entirely under periods of high CPU usage. Requires Amiga OS 2.04 or better, version 1.3, includes source. Author: Markus Illenseer

II2.0 A CLI/Shell command, which decides whether your Amiga is run- ning OS v2.x or OS v1.x - and then executes a corresponding command line/argument. Especially useful for zKick-using Amigas. Version 1.2, includes C-Source. Author: Thomas Arnfeldt

LockIt A simple commodity to protect files or drawers from any access. Uses a WorkBench AppIcon and allows selection of files via ASL-Requester. Requires OS2.0. Version 2.1, binary only. Author: Andreas Linnemann

NewMode A tool for changing the screenmode of any screen by manipula- ting the OpenScreen pointer. Includes new "ModeNames" file for the screenmodes (like HAM...). Requires OS2.0. Version 1.1. Binary only. Author: Andreas Linnemann

Prism An ANSI editor that allows animations and complete colour con- trol. It is used on many BBS's to create animated screens. Includes a configuration editor, font control, and variable playback speed. New features include automatic line and box drawing, and a special "Quick Pick" option for accessing extend characters codes. Version 1.5, an update to version 1.4 on disk number 581. Binary only. Authors: Syd Bolton, Chris Timmerberg, and Colin Vernon.

Run68017 Provides run time emulation of about 30 of the 68020 instruc- tions with a 68000. Only the emulated instructions can use the new 68020 addressing modes. Uses a gagdet to enable/disable emulation. An upgrade from Run68013 on disk number 756. Includes source in assembly. Author: Kamran Karimi

Split The opposite of the AmigaDos JOIN command. Use it to split textfiles that are too large to edit on your computer. files for email-delivery that have a file size maximum... etc. The created files have the same name as the original except with an extension of two digits. Version 1.0, binary only. Author: Jonas Svensson

StripANSI Removes all ANSI codes from a text file so that only the bare text remains. It is useful for editing terminal program cap- ture buffers. Two versions are provided: one for the command line (CLI) and one with a full Intuition interface. You can selectively strip certain codes, and generate a report. New features include more codes, better help, and tab expansion. Version 1.2, an update to version 1.0 on disk number 581. Includes source in 'C'. Author: Syd L. Bolton

Fred Fish Disk 799

All "Archiving Intuition Interface" allows you to access many features of the LHa archiver via the WorkBench. Requires reqtools.library. Version 1.03, first release. Requires KickStart 2.0 or higher. ShareWare, binary only. Author: Paul Mclachlan.

HackLite An evolved version of the public domain game Hack, written by Jay Fenlason, Andries Brouwer, Don Kneller and various others. Hack Lite is a dungeon adventure game in the style of Rogue, Hack, Moria, etc. It uses a customizable graphical dungeon display. The package includes a simple-to-use installation program, and a "Preferences"-style configuration editor. Many new objects, traps, monsters and ways to die have been added. Saved games are now much smaller, and a "Tournament mode" allows several players to compete for the highest score playing in identical dungeons. Utilities included with Hack Lite were written by Jim Cooper and Doug Walker. Author: Alan Beale

Fred Fish Disk 800

ColorSaver A "pop-up-anywhere" (almost!) color palette commodity with several features I could not find in other palette tools. Features include: Load/Save color palettes; Sliders select- able between RGB/HSV; Copy, Swap, Range Functions; Complement selected color; Left/right shifting of the entire palette; Ability to permanently alter (patch) the color tables of execu- tables with a statically allocated color table. Requires OS2.04 or greater. Version 0.84 (alpha release), includes source. Author: Dan Fish

DocDump A print utility that puts 4 pages of text on one sheet of paper, including page-headers. Beside the normal Dump mode, a double-sided Booklet mode is also available. DocDump uses its own printer drivers, making one yourself is easy. Version 3.6, binary only, shareware. Author: Robert Grob

Enforcer A tool to monitor illegal memory access for 68020/68851, 68030, and 68040 CPUs. This is a completely new Enforcer from the original idea by Bryce Nesbitt. It contains many new and wonderful features and options and no longer contains any exceptions for specific software. Enforcer can now also be used with CPU or SetCPU FASTROM or most any other MMU-Kick- start-Mapping tool. Major new output options such as local output, stdout, and parallel port. Highly optimized to be as fast as possible. This is version 37.28, an update to version 37.26 on disk number 773. Requires V37 of the OS or better and an MMU. Author: Michael Sinz

IffBoot Inspired from BOOTLOGO by Markus Illenseer, allows you to show any IFF file during bootup that will exit when the WB appears. Version 1.0, requires OS 2.04 or greater, binary only, includes some sample pictures. Author: Colin Bell, some IFF pics by Justin Trevena

Least A small, handsome, text displayer that only supports those functions most frequently used. String searching is performed with the very fast Boyer-Moore algorithm. Also checks itself for link viruses. Runs from both WorkBench and CLI. Separate version - LeastP - also deals with powerpacked files. Has been tested under both Kickstart 1.3 and 2.0. Version 0.04, binary only. Author: Thorsten Koschinski

Moontool A port of John Walker's moontool program for UNIX. It gives a variety of statistics about the moon, including phase, dist- ance, angular, size and time to next full moon. A schematic of the current phase is also shown as a picture. This is illustrative only; the accurate phase is shown in the text. Version 1.0, binary only. Author: John Walker, Amiga port by Eric G. Suchanek

MungWall Munges memory and watches for illegal FreeMem's. Especially useful in combination with Enforcer. Output can go to either the serial or parallel port. Includes a new MungList program that examines used memory areas for MungWall tag info, and outputs a list of who owns the various pieces of allocated memory, their sizes, etc. Can even identify the owner of the memory by task name. This is version 37.58, an update to version 37.54 on disk 707. Binary only. Author: Commodore Amiga; submitted by Carolyn Scheppner

Fred Fish Disk 801

ConvertA program that provides the means to easily convert numer- ical values between international, Imperial and US systems of measurement. It does this in twelve fields of measure- ment, including area, capacity, density, energy, fuel con- sumption, length, power, pressure, speed (velocity), temp- erature, volume and weight. It has a flexible, easy to use GUI and works under OS 1.3 and 2.xx. The registered version also has an ARexx port. Version 2.0, shareware, binary only. Author: Mike Fuller

CyberCron A cron utility for AmigaDOS 2.0. Uses the new, more flexible, AmigaDOS 2.0 technique for running programs. Offers an ex- tended set of options that may be specified for any given event. Version 1.5, an update to version 1.3 on disk 682, and includes various bug fixes, code tweaks, four new ARexx commands, documentation in AmigaGuide format, and more. Includes source. Author: Christopher Wichura

CyberX10 A program that can be used to control the CP290 home computer interface for use with the X10 home automation system. It requires KickStart 2.04+ and supports localization under Work- Bench 2.1+. Includes documentation in AmigaGuide format. Includes source. Author: Christopher Wichura

Luna A small program that will display the time and date of the phases of the moon for a month in any year from 1900 to 3000 AD. If a lunar eclipse occurs in that month, its time and date will also be displayed. It has an easy to use GUI and works under OS 1.3 and 2.xx. Version 1.0, freeware, binary only. Author: Mike Fuller

PowerData Patches AmigaDOS, enabling all programs to read and write files packed with PowerPacker in way that is completely trans- parent to themselves and the system. Programs will read power- packed datafiles directly, and will also magically start com- pressing their own datafiles, as they create or update them. This is version 38.105, the official successor of another pro- gram by this author, Powerpacker Patcher. Partially localized for use with Workbench 2.1. Requires Workbench 2.04+. Share- ware, binary only. Author: Michael Berg

TWC Two Way Chat & Send enables you to make use of your modem's full duplex feature. With TWC you can connect to another Amiga running TWC, then you may transmit files AND chat at the same time, in both directions. GUI-driven, needs Kick- Start 2.04 or higher. Version 2.03, freeware, binary only. Author: Lutz Vieweg

Fred Fish Disk 802

ApplSizer An AppIcon utility to get the size of disks, directories or files. Gives the size in bytes, blocks and the actual size occupied. Requires KickStart 37.175 or higher. Version 0.41, an update to version 0.20 on disk 787. Binary only. Author: Gérard Cornu.

FastLifeA fast life program featuring an Intuition interface, 33 gen- erations/second on Amiga 3000/25, 19 generations/second on Amiga 2000/ 500/1000, and 200+ patterns in text file format. Runs with Kickstart 2.04 and later, and uses the ReqTools re- quester package (included). An update to version 1.1 on disk 608. Changes include support for all screen modes, screens as large as memory allows, run for a specified number of gener- ations, stop at a specific generation, CLI and ToolTypes sup- port for file name filter and "ON" character within Picture files. Version 2.2, binary only. Author: Ron Charlton

Fd2AsmInc This little program creates assembler include files from ".fd" files (I.E. the original Commodore .fd-files). There are sev- eral ways to format the output file. Version 1.0a, OS 2.xx only, freeware, includes source in assembly. Author: Hanns Holger Rutz

QMouse An unusually small and feature-packed "mouse utility". Was inspired by, but not derived from, the original QMouse by Lyman Epp. Features include automatic window activation (like WindX), top-line blanking for A3000/A2320 users, system- friendly mouse blanking, mouse acceleration/threshold, "Pop- CLI", click-to-front/ back, "SunMouse", "NoClick", "WildStar", Northgate key remapping, and more. Requires Kickstart 2.0, but is not a commodity. Only 3K. Version 2.30, an update to version 2.21 on disk 789. Public domain, assembly source included. Author: Dan Babcock

Fred Fish Disk 803

Hackdisk A complete replacement for trackdisk.device featuring a verify option and better performance. Hackdisk is supplied as an OS module that may be RamKick'ed or placed directly in the Kick- start ROM. This is version 2.00, an update to version 1.12 on disk number 783. Now includes support for 150RPM HD floppy drives and untested support for 5.25 inch drives. Free for non-commercial use, assembly source included. Author: Dan Babcock

HyperANSI The ultimate in ANSI editors. Allows you to edit up to 999 pages at a time, with a unique 'transparency' mode which allows you to 'see through' the pages (and save as a single page). Other features include; Copy, Move, Fill, Replace, Text alignment & justification, line drawing, char- acter painting (colors and/or text), half character painting, and keyboard remapping for all 255 IBM characters, plus more. Shareware, version 1.02, binary only. Author: Mike D. Nelscn

MiniPacA very tiny PacMan clone, only about 8K. Binary only. Author: Philippe Banwarth

SCAN8800 A specialized database program to store frequencies and sta- tion names for shortwave transmitters. It can also control a receiver for scanning frequency ranges. Version 2.27, binary only. Author: Rainer Redweik

Fred Fish Disk 804

AmigaWorld A database program that contains information about every country on Earth. It enables you to have a look at the data of one country, or to compare several countries. It is easy to handle, and you can use it with your favourite colors, font, and even language (at the moment there are English and German data files). Requires 1MB of memory. This is freeware version 1.0, Modula-2 source is available by the author. Author: Wolfgang Lug

DiskMate A disk utility with multidrive disk copier (either DOS or non- DOS disks), disk formatter, disk eraser, disk installer, and floppy disk checker. Version 3.0, binary only. Author: Malcolm Harvey

Euphorion A scrolling "shoot'em up" action-game, which contains eight different levels, bonus- stages and a highscore table. This is version 1.1, binary only. Author: Carsten Magerkurth

Password A program to password protect an AutoBooting HD based system. Supports a list of authorized users and their passwords. Version 1.0, binary only. Author: Malcolm Harvey

PubChange PubChange is a commodity for AmigaDos 2.04. It isn't a public screen manager, but it is useful when used in conjunction with one. It is designed to make public screens easier to use. Whenever a new screen is brought to the front, this screen is examined. If it is a public screen, it is made into the de- fault automatically without having to explicitly do it from within a public screen manager. Thus, the current default public screen is always the one which you have most recently brought to the front, and applications which use the default public screen will appear there. Version 1.2, an update to version 1.0 on disk 771. This version fixes two serious bugs and adds minor features. Binary only. Author: Steve Koren

TrueEd A shareware editor. Version 5.5, and update to version 3.40 on disk 630. No documentation, binary only. Author: Jurgen Klein

Fred Fish Disk 805

CDTV-Player A little utility for all those people, who'd like to play Audio-CD's, while multitasking on workbench. It's an emula- tion of CDTV's remote control, but is a little more sophis- ticated. Version 1.5, an update to version 1.0 on disk 759. Public domain, binary only. Author: Daniel Amor

Cleo Implementation of a new experimental Pascal like language. Besides the normal data types, includes 2D and 3D data types, and an RGB color data type. Includes a compiler and inter- preter, example programs, and documentation. Version 1.0, includes full source in C to compiler, interpreter, and examples. Author: DIALLO Barrou

Clouds A program which creates randomly clouds on your screen. You may save them as IFF-files and use them as background for your workbench. Uses new AGA-feature (5-bitplane- hires-screen). Version 2.0, public domain. Includes complete source in KICK- PASCAL. Author: Daniel Amor

RussianFonts This is a scalable vector font. It's the Russian equivalent of the Times Roman font. It comes in two versions, ADOBE TYPE 1 (pbf-file) and PAGESTREAM FONT (dmf-file). This Font is shareware. Designed with FontDesigner. Author: Daniel Amor

Sizer A small and pure shell utility that gives the size in bytes, blocks and the actual size occupied by a directory, device, file or 'assign'. Accepts multiple arguments. Version 0.81, an update to version 0.36 on disk 777. Now requires KickStart 37.175 or higher. Binary only. Author: Gérard Cornu

Fred Fish Disk 806

HDFixer Some of the newer A3000's have high density floppy drives. In the 37.175 version of Kickstart, HD disks are not completely supported in HD mode. This program patches the system so that Kickstart V37.175 owners are able to use 1.71 MB HD disks. This very user friendly, totally new programmed version, comes as a Commodity and supports the new OS2.x functions like Public Screens, scaleable fonts, shortcut gadget activation and so on. Requires Workbench 2.04. This is version 2.00, an update to version 1.10 on disk 690. Binary only. Author: Peter-Iver Edert

Icons Some icons which can be used in the ToolManager dock window (ToolManager © by S.Becker) for instance. There are also a few tips for ToolManager users in the doc file. Author: Andre Weissflog

MXReq Creates a customizeable mutual exclude requester from a shell or AREXX script. The user can select one out of up to eight entries, each of them writes an own value to an environment variable. Including executable, sources, docs, examples and a small bonus tool. Version: 1.20 Author: Andre Weissflog

XSearch A program to search files and directories on any Amiga device. Has options to search for files or directories matching a given name pattern, length, date of last change, iff type, comment, internal strings, and protection bits. Supports the Amiga clipboard. Uses AmigaDOS 2.0 style interface. Includes both German and English versions. Version, 1.1, an update to version 1.0 on disk 724. Includes source in KICKPascal. Author: Stefan Plöchinger

Fred Fish Disk 807

RoachMotelA game where the object is to collect all the spray cans to complete the level. If you touch any creatures you will lose one life, except when stomping on a roach or hitting a roach or boyd with your head while wearing the toupee. Written in AMOS, binary only. Author: Ryan Scott

VCLI Voice Command Line Interface allows you to execute CLI or ARexx commands, or ARexx scripts, by spoken voice command through your Perfect Sound 3, Sound Master (Sound Magic), or Generic audio digitizer. VCLI is completely multitasking and will run continuously in the background, waiting to execute your voice command even while other programs may be running. With VCLI you can launch multiple applications or control any program with ARexx capability completely by spoken voice command. VCLI is compatible with both NTSC and PAL. This is version 5.2, an update to version 5 on disk number 751. New features include the capability to load alternate vocabulary files by spoken voice command, a choice of Amiga hardware timers to reduce interference with other programs, and immun- ity of the display to changes in system fonts. Binary only, requires AmigaDOS 2.0. Author: Richard Horne

VoiceCode This file contains complete documentation for voice.library (Ver 6.4), the public domain Amiga library of voice recogni- tion functions for the Perfect Sound 3, Sound Master (Sound Magic) and Generic audio digitizers. Included are descrip- tions of the functions that will allow your program to learn and recognize spoken words through your 8 bit audio digitizer. Also included are code examples in C and assembly language. Author: Richard Horne and David Benn

XTrash A constant trashcan implemented as an application icon. Can erase anything; files, directories, trashcans and disks. Disk formatting requires an external formatter. Conforms closely to the AMIGA Style Guide. Requires AMIGA OS 2. Version 1.01, includes source in KICKPascal. Author: Stefan Plöchinger

Fred Fish Disk 808

KingFisher A specialized database tool providing maintenance and search capabilities for the descriptions of disks in the format used by this library. KingFisher's database can span multiple (floppy) disk volumes, can be edited by text editors that support long text lines, can add disks directly from unedited email or usenet announcements, can remove disks, rebuild a damaged index, find next or previous software versions, print or export (parts of) the database, and more. Includes a data- base of disks 1-800. This is version 1.15, an update to ver- sion 1.11 on disk 783. Binary only. Author: Udo Schuermann

Look A powerful program for creating and showing disk magazines. Supports IFF pictures, IFF brushes, ANSI, fonts, PowerPacker, and many more features. Programmed in assembly language to be small and fast. German language only. Version 1.5, an update to version 1.2 on disk 743. Now runs on NTSC machines in interlace mode and includes many new features. Shareware, binary only. Author: André Voget.

Fred Fish Disk 809

CPK A program to render a space filling representation of atoms in molecules. This is the type of representation one would find in the plastic 'CPK' (Corey, Pauling, Kendrew) models often used in organic chemistry. There are no hard coded constraints on the number of atoms it can process, it cor- rectly handles intersecting 3-dimensional spheres by using the Bresenham circle algorithm in 3D, and computes using the the current display screen resolution for simplicity and speed. Version 1.0, binary only. Author: Eric G. Suchanek

EPU A program like Stacker or XPK that allows applications to access compressed data from AmigaDOS devices without knowing that the data is compressed, and automatically compresses new data. The file size is not limited by memory and the settings of the handler can be changed at any time. Version 1.0, shareware, binary only. Author: Jaroslav Mechacek

GetString A small utility that puts up a string requester and stores the result in an environment variable (either local or global) that can be used in Shell scripts. Requires OS 2.04+ and ReqTools.library. Written in E, source included. Author: Diego Caravana

SmallMath "Drop-in" replacements for the Commodore IEEE math libraries for users with a math coprocessor. Since these libraries do not contain the coprocessor-emulation code normally present, they are 60%-90% smaller than the usual libraries. For the same reason, however, they cannot be used without a coproces- sor. Version 1.2, an update to version 1.1 on disk 718, fixes a bug in the cmp() function. Public domain, partial source included. Author: Laz Marhenke

Fred Fish Disk 810

Amiga_E An Amiga specific E compiler. E is a powerful and flexible procedural programming language and Amiga E a very fast com- piler for it, with features such as compilation speed of 20000 lines/minute on a 7 Mz amiga, inline assembler and linker integrated into compiler, large set of integrated functions, module concept with 2.04 includes as modules, flexible type- system, quoted expressions, immediate and typed lists, low level polymorphism, exception handling and much, more. Written in Assembly and E. Version 2.1, public domain, includes partial sources. Author: Wouter van Oortmerssen

MakeDMake An automated DMake file generator. You give it the names of all the C-files used to produce your executable (except #include'd .c or .h files), and it will automatically scan them to find all dependencies, and produce a ready to use (in many cases) DMakeFile calling DCC with options you will need for normal compilation and linking. Version 0.19, an update to version 0.15 on disk 789. Includes source. Author: Piotr Obminski, from original code by Tim McGrath

PrintManager A printer spooler for AmigaDOS 2.0 or later. Works with all programs, whether they use the parallel or serial device, use PRT: or the printer device directly, are printing text or gra- phics, and has an Intuition interface. Version 1.0, binary only. Author: Nicola Salmoria

Snake An updated version of the old computer game which lives in a Workbench window. You control a "snake" which grows by eating "frogs" and avoiding obstacles. Requires AmigaDOS 2.0. C source included. Author: Michael Warner

StarClock StarClock displays time, date and stardate of the popular TV series Star Trek in a small window on the right hand side of the workbench screen. StarClock is a commodity. Requires OS 2.0 or greater. Version 1.01, binary only. Author: Michael Laurent, Volker Goehrke

TimeKeeper A program that restores system time after resets. This is accomplished by storing the current time in a resident struct- ure at regular intervals and restoring it at reboot. Useful for Amigas that don't have a battery backed up clock. Requires KickStart 2.0 or higher. Version 1.0, includes source in C. Author: Mattias Moltkesson

To Be Continued.....

In Conclusion

To the best of our knowledge, the materials in this library are freely distributable. This means they were either publicly posted and placed in the public domain by their authors, or they have restrictions published in their files to which we have adhered. If you become aware of any violation of the authors' wishes, please contact us by mail.

IMPORTANT NOTICE!

This list is compiled and published as a service to the Commodore Amiga community for inform- ational purposes only. Its use is restricted to non-commercial groups only! Any duplication for commercial purposes is strictly forbidden. As a part of Amazing Computing™, this list is inher- ently copyrighted. Any infringement on this pro- prietary copyright without expressed written per- mission of the publishers will incur the full force of legal actions.

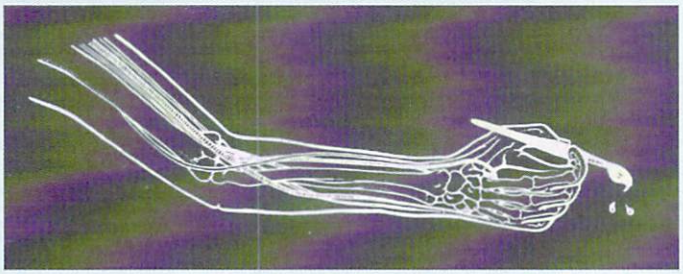
Any non-commercial Amiga user group wishing to duplicate this list should contact:

PiM Publications, Inc.
P.O.Box 869
Fall River, MA 02722

AC is extremely interested in helping any Amiga user groups in non-commercial support for the Amiga.

•AC•

And furthermore...



Yvonne Wylie Walston, Medical Illustrator

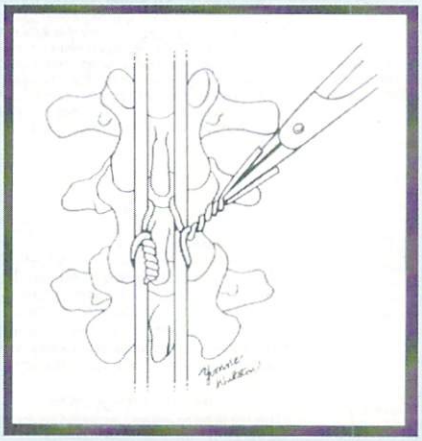
by Merrill Callaway

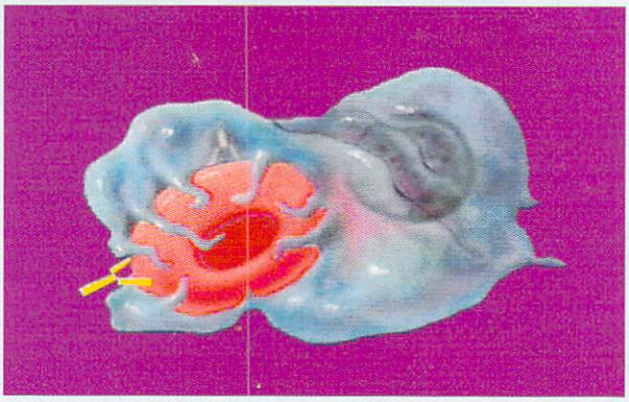
Yvonne Wylie Walston has been a professional Biomedical Illustrator for over 10 years. She has a B.S. in Zoology from the University of Kentucky and an M.A. in Medical Illustration from the University of Texas Health Science Center at Dallas. She became interested in computer imaging when on staff at the University of New Mexico Biomedical Communications Department. In the early 1980s, Yvonne attended a computer graphics seminar at an Association of Medical Illustrators (AMI) convention, and one of the presenters stated that more cost-effective systems would be available in about three to five years.

The Amiga arrived right on schedule! Soon after witnessing the Amiga's power in her University department's video area, Yvonne started her own company, now using an Amiga 3000 and more recently an A-1200 to render medical illustrations primarily with Gold Disk's *Professional Draw*, Electronic Arts' *Deluxe Paint IV*, and Digital Creations' DCTV. While still producing most of her medical art with traditional techniques, Yvonne says, "I consider the Amiga to be a valuable production tool, like my airbrush." Yvonne likes to use the Amiga for sketches that she later renders with traditional techniques. On her Amiga, Yvonne produced presentation graphics for a law firm, video animations for a professional media service, and structured drawings for a publication by a surgeon. Yvonne is planning a demonstration at an annual AMI meeting called, "Multitasking With The Amiga in a Small Medical Illustration Studio." Yvonne admits that she is just beginning to tap the resources the Amiga brings to the professional illustrator's field. She claims that the Amiga is now "indispensable" to her work.

Yvonne's credits appear in the *American Association of Neurological Surgeons*, Mosby-Year Book, Inc.; *Institute in Basic Life Sciences*, Wm.C. Brown Publishing; University of New Mexico Press; and in *Radiologic Technology*, *Radiation Therapist*, *Veterinary Economics*, *Illustrated Medicine*, *Clinical Pediatrics*, and more. Her book illustrations have won several awards; notably a 1992 Award of Excellence from the AMI and 1989-90 Best of Show from the Kachina Chapter of the Society for Technical Communication.

•AC•







ON WITH THE SHOW!

The 4th Annual
WORLD OF COMMODORE AMIGA
IN NEW YORK CITY

April 2, 3 & 4, 1993

Come to America's greatest exhibition and sale of Amiga hardware, software and accessories!

SEE, TRY AND BUY — ALL THE LATEST EXCITING PRODUCTS:
The dazzling new Amiga 4000!
The Amiga 1200!

FREE SEMINARS with show admission
Desktop Video! Desktop Publishing!
Multimedia! Animation & Graphics!
AND MUCH, MUCH MORE!

New York Passenger Ship Terminal, Pier 88
(Between 48th & 52nd on Hudson River)

Friday & Saturday 10 a.m.–5 p.m.
Sunday Noon–5 p.m.



ADMISSION: $15.00 per day, $30.00 for three-day pass.

SHOW HOTEL: Holiday Inn Crowne Plaza, 1605 Broadway, New York, NY 10019. For reservations call (212) 977-4000. Show rate $135 single or double. Deadline March 9, 1993.

For more show information, phone (416) 285-5950.

Circle 169 on Reader Service card.

SAVE WITH PRE-REGISTRATION

To pre-register complete and mail this form with check for $25.00 (3-day pass) or $10.00 (single day) BEFORE MARCH 5, 1993.

Name_____

Address_____ Zip_____

City_____

Make check payable to RAMIGE MANAGEMENT GROUP.
Mail to: 3380 Sheridan Dr., Suite 120, Amherst, NY 14226

BRILLIANCE™

PROFESSIONAL PAINT & ANIMATION

IT HAD TO HAPPEN...

We put the creators of Deluxe Paint ST™, Deluxe PhotoLab™, and DCTV Paint™ together with the goal of developing the most awesome paint and animation software ever for the Amiga. After many man-years of inspired design and programming, it is simply...

BRILLIANCE!

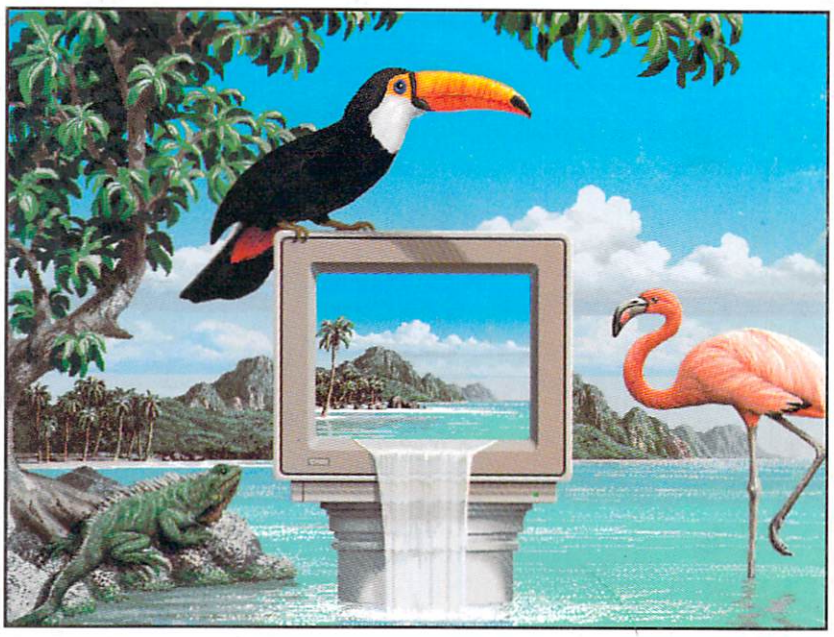
IT'S AMAZING...

By far the best paint program ever created for the Amiga. Paint and animation features you wish you had before are here now. You can paint and animate in virtually every Amiga graphics mode including all of the new A4000 modes! Brilliance also has a unique true color mode allowing you to create and modify full fidelity 24 bit pictures. Your Amiga has never shined as bright as it will with **BRILLIANCE**.



IT'S POWERFUL...

Multiple levels of UNDO allow you to experiment without fear. Written in assembly language for the quickest response, smallest program size and the most sophisticated features.



Artwork by Jim Sachs. Created at 640x480 in 256 colors on an Amiga 4000.

A rich set of drawing modes will unleash your full creative potential. Multiple paint and animation buffers can be worked on at once, limited only by memory. The more memory you have, the better Brilliance becomes. Power, features, sophistication, ease of use, Brilliance has it all.

IT'S EASY...

The user interface was designed to put YOU in control, not the program. Quickly and precisely control all paint and animation features with the dynamic menuing system. It gets out of your way at the press of a button. A help window assists in identifying controls as well as current modes. The stacking menu bars can be user configured and recalled with function keys. You can even save your own configurations.

IT'S BRILLIANCE...

Once and for all, in one easy to use package, the total paint and animation system for the Amiga.

Best of all, it's from Digital Creations.

Works with all Amiga models.
Minimum memory requirement: 1 Meg.

Graphics modes supported:
Register based 2, 4, 8, 16, 32,
or 64EHB Colors.
6 bit HAM, 12 bit true color, 24 bit true color.

With the new A4000:
Register based 2, 4, 8, 16, 32, 64EHB,
64, 128, and 256 Colors.
6 bit HAM, 8 bit HAM,
12 bit true color, 24 bit true color.

(True color modes are represented with HAM mode displays however they are maintained in full fidelity internal representations.)

DIGITAL CREATIONS

P.O. Box 97, Folsom CA 95763-0097 • Phone 916•344•4825 • FAX 916•635•0475

Brilliance and DCTV Paint are trademarks of Digital Creations, Inc.
Deluxe Paint ST and Deluxe PhotoLab are registered trademarks of Electronic Arts. Amiga is a registered trademark of Commodore-Amiga, Inc.

Circle 108 on Reader Service card.